Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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Association between Mental Disorders and Later Medical Conditions

Supplementary material

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Supplementary Material - Association between Mental Disorders and Later Medical Conditions

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METHODS

Information on all residents, including sex, birthdate and vital status, has been recorded in the Danish Civil Registration System since 1968,[1] along with a unique personal identification number that can be used to link data from national registries.

Ascertainment of mental disorders

The Danish Psychiatric Central Research Register[2] contains records regarding all admissions to psychiatric inpatient facilities since 1969 and visits to outpatient psychiatric departments and emergency departments since 1995. It uses the Danish modification of the International Classification of Diseases, Eighth Revision (ICD-8; from 1969 to 1993),[3] and Tenth Revision (ICD-10; from 1994 onwards)[4] diagnostic systems. For each attendance at a hospital, outpatient department or emergency department, the treating doctor can allocate: (a) a single action (or current) diagnosis, (b) a single basic (or underlying) diagnosis, (c) one or more secondary diagnoses, and (d) one or more associated diagnoses. In this study, mental disorders coded under any of these categories were included.

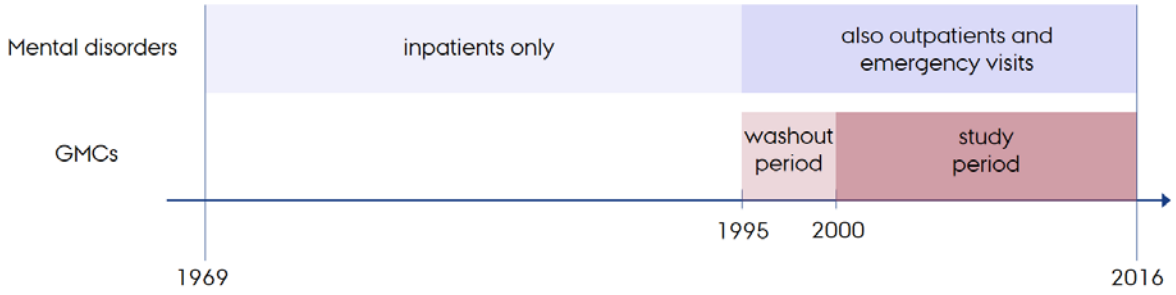
Ascertainment of general medical conditions

Prior's criteria[5] for investigating multimorbidity in the Danish registers was developed to identify cases certain conditions, including 31 chronic general medical conditions (henceforth referred to as medical conditions), by combining information on diagnoses Danish National Patient Register[6] and prescription medication redeemed within predefined time frames in the Danish National Prescription Register.[7] The Danish National Patient Register holds information on diagnoses made during hospital visits. To assess conditions predominately managed in primary care, the Danish National Prescription Register provides data on prescriptions for disease-specific medications (Anatomical Therapeutic Chemical Classification System drug codes). The criteria were designed to use in a study combining data from the registers with responses to a survey. In our study, we were able to also add data from the Cause of Death Register[8], in order to capture medical conditions which people died from, but which had not received a hospital diagnosis of or relevant treatment for. The Danish National Patient Register and Cause of Death Register employed ICD-10 codes during the period of interest.

Study design

Follow-up commenced on 01/01/2000 or at the earliest age a person became "at risk" for each respective mental disorder (Table S1), whichever occurred later. Follow-up ended at medical condition onset or censoring (death, emigration, or April 10, 2017), whichever came first. A 'wash-out' period in the five years before follow-up (1995-1999) excluded prevalent medical condition cases from their respective analysis. During the 'washout period' individuals who had been diagnosed with, or received prescribed medication for, the medical condition of interest before the observation period were identified. They were considered prevalent cases and excluded from the analyses (i.e. 'washed-out').

The periods mental disorders and medical conditions were observed in are depicted below.

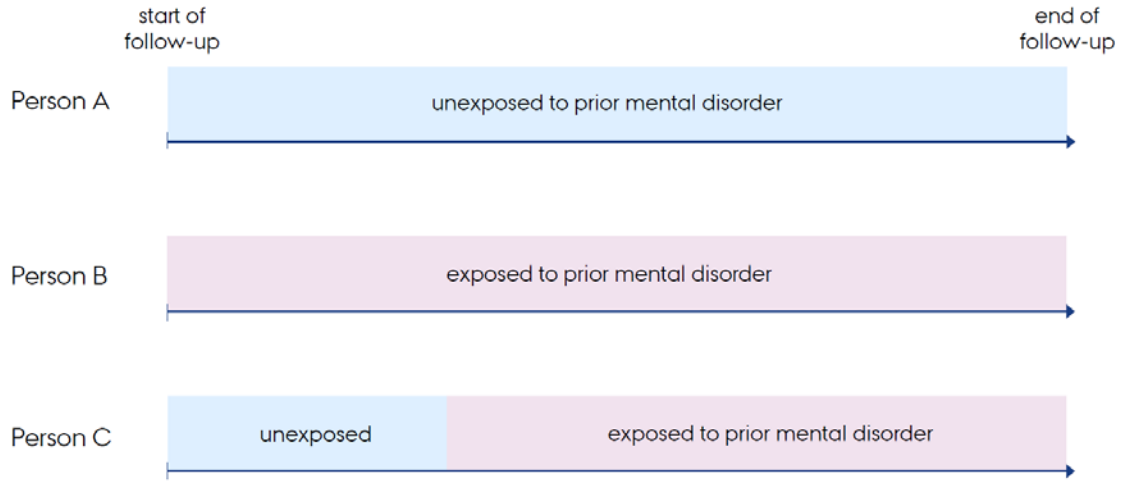


The longest period an individual was followed-up for to ascertain whether a medical condition diagnosis was made, was 17 years (2000-2016). However, mental disorders could be diagnosed between 1969-2016), so the interval between diagnosis of a mental disorder and medical condition of interest could reach a maximum of 48 years (1969-2016).

Among all incident medical condition category cases (n = 7 107 848), a mental disorder was diagnosed on the same day in <0.01% of the instances. In studies related to comorbidity, it is important to include these individuals in the time-to-event analyses. In keeping with our previous study,[9] we broke these ties by moving a proportion of the mental disorder diagnoses to one day earlier. Those moved were selected at random, and the proportion to be moved was decided for each mental disorder-medical condition pair by calculating the percentage of cases in which the

mental disorder occurred before the medical condition among those with both disorders occurring within a 5-year window.

Mental disorders were treated as a time-varying exposure when considering relative risks, as shown in the diagram below: individuals were ‘unexposed’ to a specific disorder, moving to the ‘exposed’ group on the day they were diagnosed for the first time with this disorder. A mental disorder had to be diagnosed before a medical condition in order to be considered an exposure for the medical condition. We further split the exposure variable into a time-varying variable with seven categories: one unexposed category and six exposed categories depending on the time since the first diagnosis of the mental disorder: 0-6 months, >6-12 months, >1-2 years,>2-5 years, >5-10 years, >10-15 years, or >15 years. Models including this estimated lagged HRs and were used to investigate whether the association changed depending on the time since mental disorder onset.

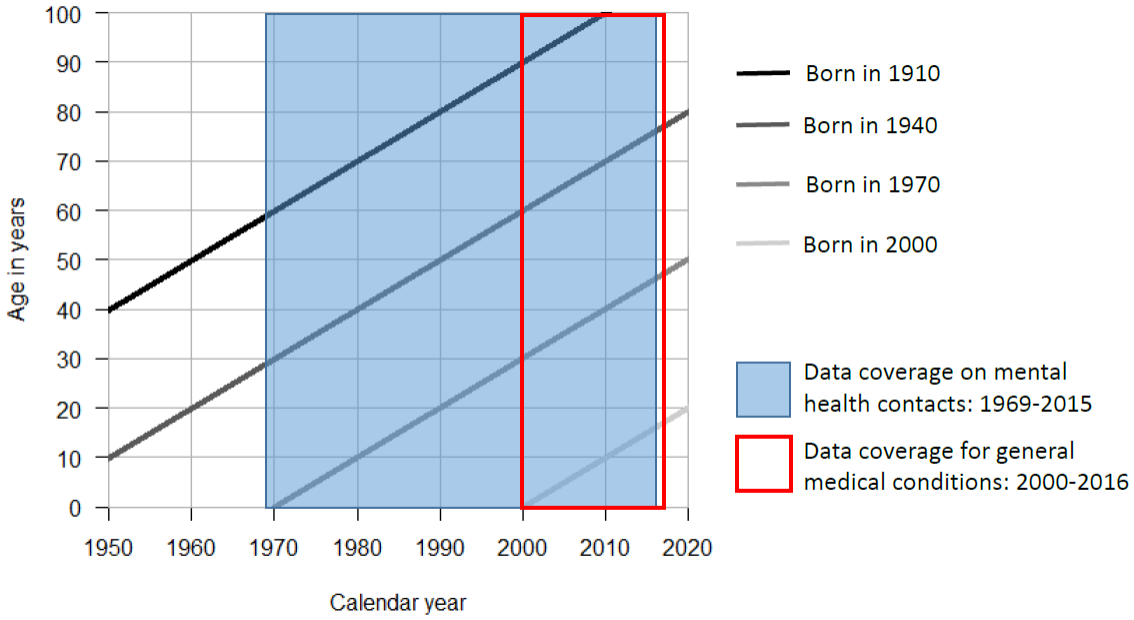


For every index person with a mental disorder, up to five “references” were randomly selected. They were matched on sex and date of birth (born within 30 days). Additionally, they had to be “free” of the relevant mental disorder (not received a diagnosis) at or before the age that the index person was diagnosed with it, when follow-up for cumulative incidence proportions started. Follow-up for obtaining cumulative incidence proportions starts at the age the relevant mental disorder is diagnosed, among those who receive a diagnosis. For those in the reference group, it starts at the exact age the person they were matched to was when they received a diagnosis. For simplicity, throughout this paper, start of cumulative incidence

proportion follow-up has been referred to as the ‘date of diagnosis’ for both those with mental disorders and their reference group. People in the reference group could theoretically act as a ‘reference’ for multiple index people. They could also be index persons themselves, if they went on to develop the mental disorder at a later age than that they had been selected to be a reference individual at. For a minority of index people, five sex and date of birth matches could not be found – some had one to four reference individuals.

Cumulative incidence proportions were stratified by sex and age (at diagnosis of the mental disorder) groups (<20, 20-<40, 40-<60, 60-<80, and ≥80 years). They provide absolute risks that can be interpreted as the percentage of individuals among those with and without a particular mental disorder who develop the medical condition after a specified time.

The Lexis diagram below shows the age attained by people born in different years when information on mental disorders and medical conditions is being considered. For example, for the cohort of individuals born in the year 1940, diagnoses of mental disorders will be looked at between the ages of 29 and 75 years; and medical condition status will be ascertained between the ages of 60 and 76 years. In this cohort, we were able to identify (and exclude from the analysis) prevalent medical conditions (which appeared in the hospital register or for which prescription medication was received for) between the ages of 55 and 59 years. We were not able to identify any diagnoses occurring before the age of 55 years.



The analysis was run to consider the risk of developing each medical condition after a first diagnosis of each mental disorder. For each analysis, the development of only one medical condition was considered i.e. follow-up for the medical condition of interest continued until medical condition diagnosis or censoring (due to death, emigration or end of follow-up), regardless of the diagnosis of other medical conditions (with the exception of dyslipidemia, where follow-up was additionally censored if ischemic heart disease was diagnosed).

Statistical analysis

Cox proportional hazards models were used to calculate relative risks. When the rates of a medical condition among the exposed and unexposed are not proportional over time, the estimates can be interpreted as an average HR over the entire follow-up period.[10]

To avoid multicollinearity, the count variable used when adjusting for prior mental disorders could take the values 0, 2, 3 or 4+ (i.e. not 1; if only 1 other mental disorder had been diagnosed prior to the mental disorder of interest, the count variable was set at 0).

All analyses were performed on the secured platform of Statistics Denmark using STATA/MP version 15.1 (Stata Corporation, College Station, Texas, USA). As some mental disorder-medical condition pairs are infrequent, some estimates/plots have

insufficient data. Estimates were not displayed for HRs if there were fewer than four exposed cases, or for cumulative incidence proportions, if fewer than 15 cases or 50 persons were at risk.

RESULTS

The influence of sex on pairwise associations between mental disorders and medical conditions

Sex-specific hazard ratios for the associations between mental disorders and medical condition categories are shown in Supplemental Figures S1-S2. Despite some differences in estimates, the general findings with respect to medical conditions for Substance Use Disorders, Mood Disorders, Neurotic Disorders and Personality Disorders did not vary by sex. Estimates for Urogenital Conditions (which comprised of kidney disorders and prostate disorders, the latter of which females are not at risk of) were normally higher for women with mental disorders than for men with mental disorders when compared to their respective “unexposed” populations. For the other pairs, the patterns were similar, but with some notable differences, for example, for Schizophrenia, the HR for Cancer was lower for males (HR 0.96 [95% CI 0.92-0.99]) than for females (HR 1.12 [95% CI 1.09-1.16]). The HR for Gastrointestinal Conditions were higher for males (HR 1.29 [95% CI 1.25-1.34]) than females (HR 1.17 [95% CI 1.13-1.21]); as was the HR for Musculoskeletal Conditions (HR 0.99 [95% CI 0.92-1.07] for males, HR 0.84 [95% CI 0.81-0.88] for females).

Sex-specific estimates for the 31 medical conditions can be seen in Supplementary Figures S13-22. Sex-specific lagged HRs are found in Supplementary Figures S43-S62 for medical condition categories, and in Supplementary Figures S73-S82 for the 31 specific medical conditions.

Cumulative incidence proportions differed by sex for certain mental disorder-medical condition pairs, however in most cases the shape of the cumulative incidence proportion curves were the same for males and females, even where there were differences in magnitude. Sex-specific estimates can be found in Supplementary Figures S113-S122 and S133-S142.

Results for three examples of mental disorder-medical condition pairs

Mood Disorders – Circulatory Conditions

For Circulatory Conditions, 744 738 persons were excluded from the study population because they had this type of medical condition before follow-up began. The remaining 5 195 561 were considered as ‘at risk’ of an incident Circulatory Condition and were included in the analysis. Of these, 1,359,330 (26.2%) were diagnosed with a Circulatory Condition for the first time in the follow-up period.

Model A’s HR (adjusted for age, calendar time and sex) for developing any Circulatory Condition for those diagnosed with a Mood Disorder, compared to those who were not diagnosed with a Mood Disorder, was 1.43 (95% CI 1.41-1.44) [Figure 1]. Model B’s HR (additionally adjusted for prior mental disorders in addition to Mood Disorders) was 1.32 (95% CI 1.31-1.34) [Figure 1]. Sex-specific Model B estimates were 1.48 (95% CI 1.46-1.50) for males and 1.30 (95% CI 1.29-1.32) for females. Considering specific medical conditions within the broad category of Circulatory Conditions, the highest HR was seen for stroke at 1.46 (95% CI 1.44-1.48); and the lowest for atrial fibrillation at 1.02 (95% CI 1.00-1.04).

With respect to the pattern of HRs over time since the onset of the mental disorder, the highest HR between Mood Disorders and Circulatory Conditions is seen in the first six months (2.39 [95% CI 2.29-2.48], followed by a gradual drop in HRs over time (after 15 years, the HR was 1.18 [95% CI 1.17-1.20]). Hazard ratios were similar throughout follow-up for males and females.

The results also foreground the general pattern of earlier age onset for mental disorders such as Mood Disorders, compared to later age of onset for many of the medical conditions. For example, among those who were diagnosed with a Mood Disorder, only 0.4% received a subsequent diagnosis of a Circulatory Condition within the first month. In the first 5 years after being diagnosed with Mood Disorders, 14.5% were diagnosed with a Circulatory Condition. However, after 15 years since Mood Disorder diagnosis, the percentage was more substantial (40.9%). In the reference group, the comparative estimates were 0.1% within the first month (with follow-up starting from the age the individuals that the reference group were matched

to were first diagnosed with a Mood Disorder), 9.8% within 5 years, and 32.6% after 15 years. In other words, after 15 years, approximately 4 out of 10 people with a Mood Disorder had developed a Circulatory Condition, compared to 3 out of 10 in the matched non-Mood Disorder reference group.

When we stratified these cumulative incidence estimates by age of diagnosis of the Mood Disorder, after 15 years of observation, the differences between the Mood Disorder versus the matched reference groups were greater. For the 60-80 years and 80+ age groups, CIPs for the Mood Disorder group were slightly higher than those of the matched reference group but the estimates became more congruent. At the end of the 15-year follow-up CIPs for Circulatory Conditions were 70.70% (95% CI 69.71-71.66) for the Mood Disorder group and 74.71 (95% CI 74.27-75.13) for the matched reference group.

Substance Use Disorders – Gastrointestinal Conditions

After “washing out” prevalent cases of Gastrointestinal Conditions, there were 5,858,583 people left in the population. During follow-up 327,697 of these individuals were diagnosed with a Gastrointestinal Condition for the first time.

The Model A HR (adjusted for age, calendar time and sex) for developing a Gastrointestinal Condition was 3.61 (95% CI 3.56-3.66) among those who received a diagnosis of Substance Use Disorders, compared to those who did not. Model B’s HR (additionally adjusted for prior mental health comorbidity) was slightly lower at 3.35 (95% CI 3.30-3.40). Sex-specific estimates for Model B were 3.60 (95% CI 3.54-3.67) for males and 3.01 (95% CI 2.94-3.08) for females.

Considering time since Substance Use Disorder diagnosis, gave the highest HR of being diagnosed with a Gastrointestinal Condition within 0-6 months compared to those with no Substance Use Disorder diagnosis, with a Model B HR of 5.64 (95% CI 5.21-6.10). After 6 months from time of diagnosis the risk dropped, with HRs of 4.17 and 4.27 (95% CIs 3.80-4.57 and 4.00-4.55) for 6-12 months and 1-2 years, respectively. They dropped further at 2-15 years after diagnosis to between 3.70 and 3.86, with a final drop to 2.88 (95% CI 2.82-2.94) when more than 15 years had

passed since Substance Use diagnosis. Estimates were higher throughout follow-up for males with Substance Use than females with Substance Use. Looking at estimates for the medical conditions which make up the Gastrointestinal Conditions group, it can be seen that these results are driven by chronic liver conditions, which have an all-persons HR of 12.72 (95% CI 12.43-13.01) for the entire follow-up period.

Among those with a Substance Use Disorder diagnosis, 18.1% (95% CI 17.8-18.4%) received a diagnosis of a Gastrointestinal Condition within 15 years of their Substance Use Disorder diagnosis. Cumulative incidence among the matched reference group was 5.6% (95% CI 5.5-5.6%)

Proportions of those who were diagnosed with a Gastrointestinal Condition were higher among those diagnosed with Substance Use Disorders, compared to their reference population, if diagnoses were made before the age of 80 years. When a first diagnosis of Substance Use Disorders was made above the age of 80 years, the proportion who received a Gastrointestinal Condition diagnosis within 15 years was higher among the references. This is likely to be due to earlier mortality in those with Substance Use Disorders.

Neurotic Disorders – Cancers

After removing individuals who had been diagnosed with Cancer prior to the study period, 5,857,164 people remained. During follow-up, 481,012 were diagnosed with cancer for the first time.

Those diagnosed with a Neurotic Disorder had a HR of 1.17 (95% CI 1.16-1.19) for Model A (adjusted for age, calendar time and sex) and 1.13 (95% CI 1.11-1.15) for Model B (additionally adjusted for prior mental health comorbidity) for subsequent Cancer diagnosis, compared with those not diagnosed with a Neurotic Disorder. The Model B estimate was 1.06 (95% CI 1.03-1.08) for males and 1.18 (95% CI 1.15-1.20) for females.

The increased risk of being diagnosed with Cancer was greatest in the first 6 months following Neurotic Disorder diagnosis (HR 1.59, 95% CI 1.45-1.73). From 6 months onwards, HRs dropped to between 1.03 and 1.16. Hazard ratios for females were generally slightly higher than for males.

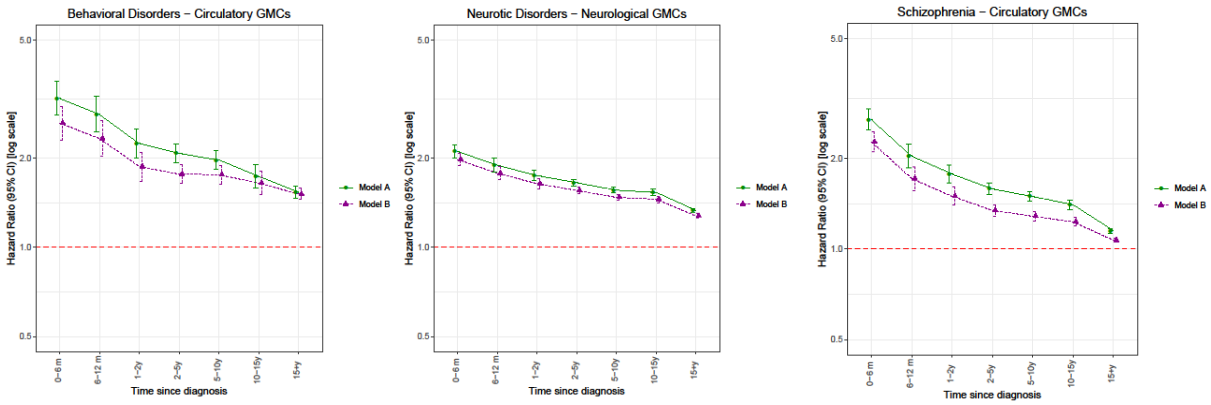
Within 15 years of diagnosis, 6.5% (95% CI 6.3-6.6%) of those with a Neurotic Disorder diagnosis subsequently received a diagnosis of Cancer. Among the matched reference group, the cumulative incidence of Cancer was 6.5% (95% CI 6.4-6.5%).

Diagnoses of Cancer within the 15 year follow-up were very similar among those diagnosed with a Neurotic Disorder, compared to their reference group, if diagnoses were made before the age of 60 years. When a first diagnosis of a Neurotic Disorder was made above 60 years of age, the proportion who were diagnosed with Cancer was similar for approximately 5 years, after which time the proportion was greater among the reference group.

DISCUSSION

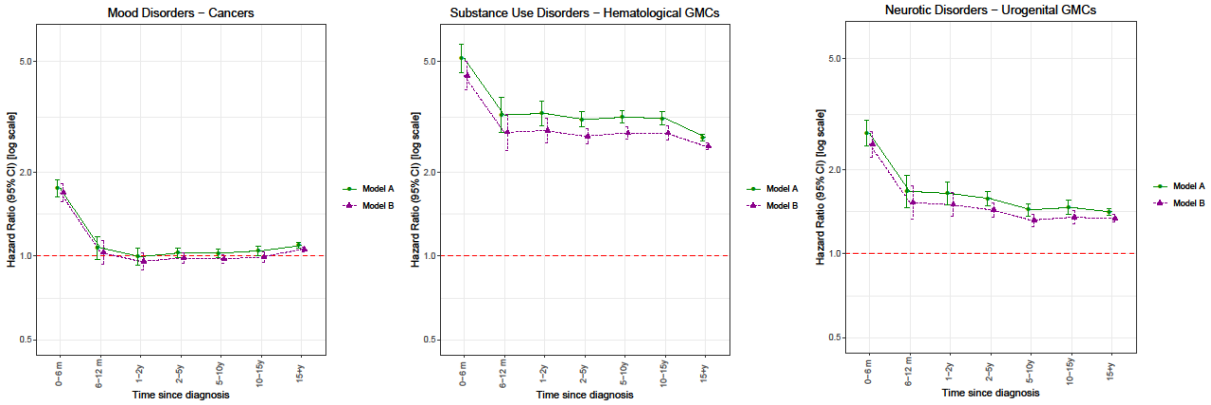
Patterns of lagged HRs

The HRs for many mental disorder-medical condition pairs were highest closest to the diagnosis of the mental disorder. During the subsequent years, while there was a relatively steady decline in HRs, they still remained elevated. Behavioral Disorders-Circulatory Conditions, Neurotic Disorders-Neurological Conditions, and Schizophrenia-Circulatory Conditions were among the pairs to exhibit this pattern. It may reflect the interplay between (a) a small increased risk of medical condition from the onset of the mental disorder, and (b) the rising prevalence of some types of medical condition in the general population as they age, leading to convergence of hazards. This pattern suggests that medical conditions may be 'brought forward' among those with mental disorders.



Another pattern seen quite frequently displayed a relatively high HR close to mental disorder diagnosis, followed by a steep drop. This was seen for Mood Disorders-Cancer, Substance Use Disorders-Hematological Conditions, and Neurotic Disorders-Urogenital Conditions, among others. There are a number of possible explanations for this pattern. Berkson's bias[11] could explain the increased detection of medical conditions soon after first hospital contact with a mental disorder; there may be increased detected related screening in accordance with guidelines following certain mental disorders or due to to physician behaviour after presentation. Some treatments for mental disorders (e.g. antipsychotic medications) may be associated with a subsequent increase in risk of medical conditions (e.g. consequences of obesity). Some medical conditions that can take some time to confirm diagnoses of (e.g. cancer or HIV may lead to symptoms of depression or anxiety. Alternatively, the

pattern may reflect the reality of diagnostic uncertainty, for example psychiatric symptoms could be a sign of undetected cancers.[12]



Limitations

As described in the main discussion section, there will be under-detection of mental disorders and medical conditions. This is partly due to lack of data on diagnoses made in general practice. While cases treated only in primary care may be identified from data on disease-specific prescription redemption (e.g. diabetes mellitus and COPD), case ascertainment using diagnoses relies on those made in secondary care or as causes of death. For some disorders, e.g. schizophrenia, this is likely to have limited impact in terms of misclassification. However, other disorders, like depression, are predominantly treated in primary care.[13] For these disorders, milder cases are likely to be missed.

Supplementary Material - Association between Mental Disorders and Later Medical Conditions

FIGURES

Figures S1-S2. Pairwise associations for general medical condition categories

Hazard ratios (HRs) and 95% confidence intervals (CIs) comparing the risk of persons with and without a diagnosis of each prior mental disorder receiving a later diagnosis within a general medical condition category. Both Model A (green points) and Model B (purple triangles) are displayed.

The x-axes range from 0.5-9.

S1. Males

S2. Females

Figure S1. Hazard ratios (HRs) and 95% confidence intervals (CIs) comparing the risk for <u>males</u> with and without a diagnosis of a prior mental disorder receiving a later diagnosis within a general medical condition category

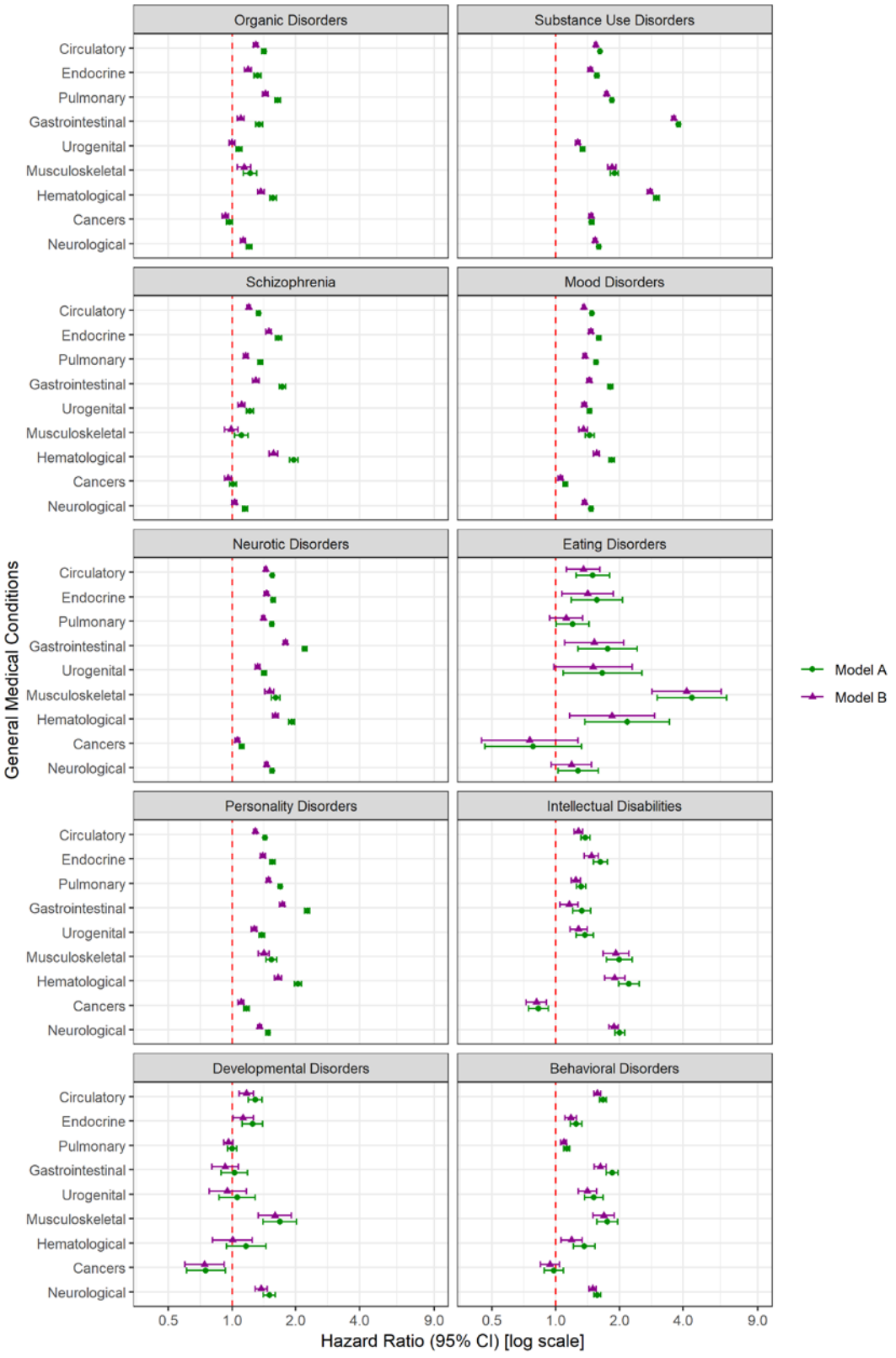
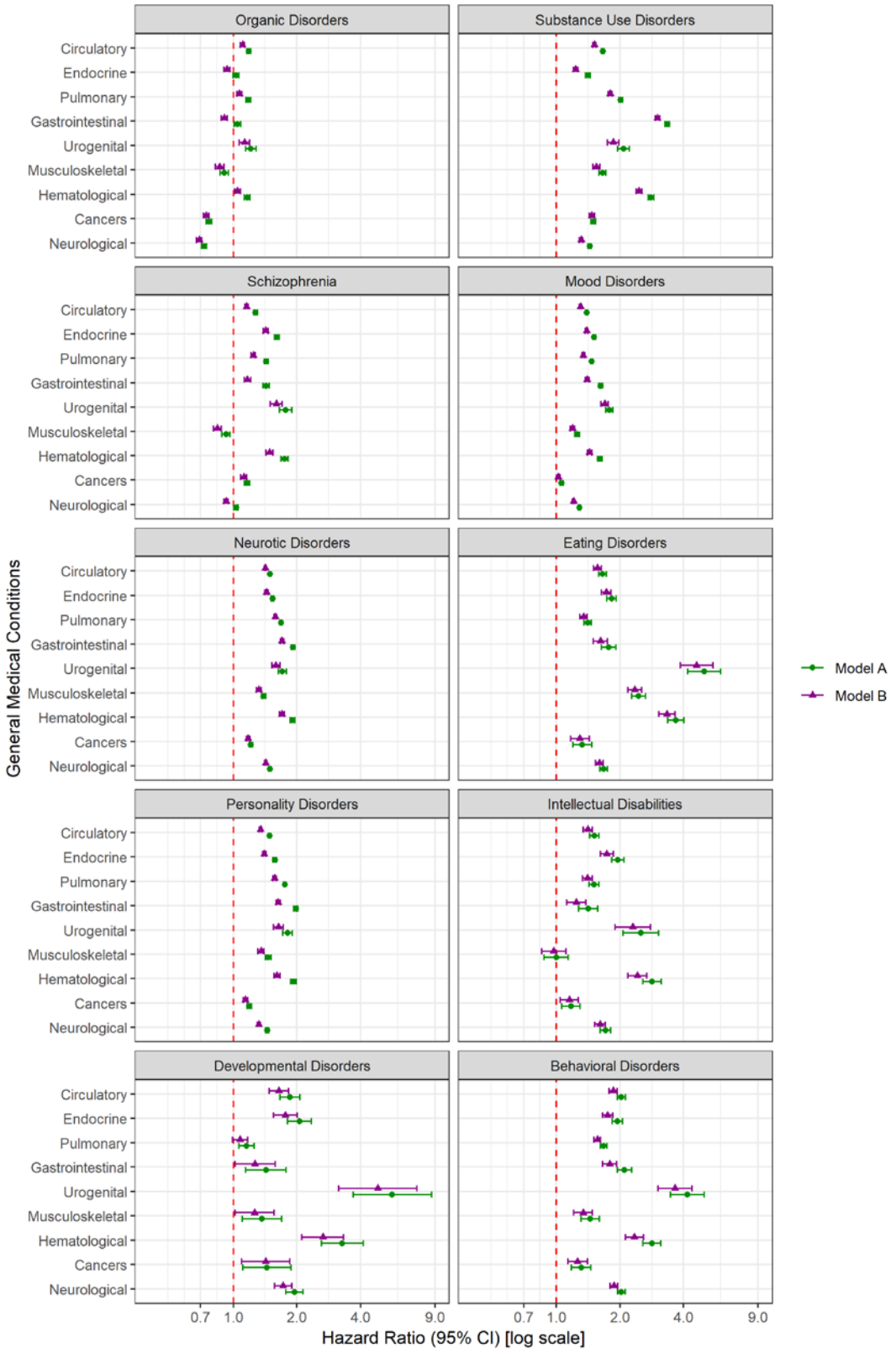


Figure S2. Hazard ratios (HRs) and 95% confidence intervals (CIs) comparing the risk of <u>females</u> with and without a diagnosis of a prior mental disorder receiving a later diagnosis within a general medical condition category



Figures S3-S12. Pairwise associations for specific general medical conditions

Hazard ratios (HRs) and 95% confidence intervals (CIs) comparing the risk of persons with and without a diagnosis of a prior mental disorder receiving a later diagnosis within a general medical condition. Estimates with fewer than four exposed cases are not shown.

Displaying estimates for Model A (green points; adjusting for sex and calendar time) and Model B (purple triangles; further adjustment for other mental disorders that had onset prior to the mental disorder of interest).

The x-axes range from 0.25-15

S3. Organic Disorders
S4. Substance Use Disorders
S5. Schizophrenia
S6. Mood Disorders
S7. Neurotic Disorders
S8. Eating Disorders
S9. Personality Disorders
S10. Intellectual Disorders
S11. Developmental Disorders
S12. Behavioral Disorders

Displaying Model B estimates for males (blue triangles) and females (red points)

The x-axes range from 0.25-18

S13. Organic Disorders
S14. Substance Use Disorders
S15. Schizophrenia
S16. Mood Disorders
S17. Neurotic Disorders
S18. Eating Disorders
S19. Personality Disorders
S20. Intellectual Disorders
S21. Developmental Disorders
S22. Behavioral Disorders

Figure S3. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Organic Disorders

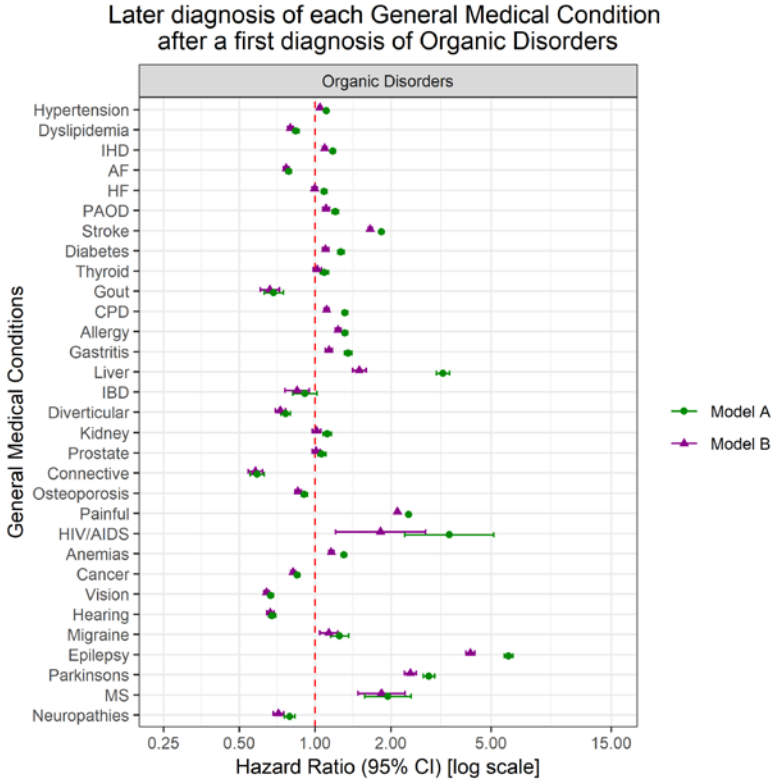


Figure S4. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Substance Use Disorders

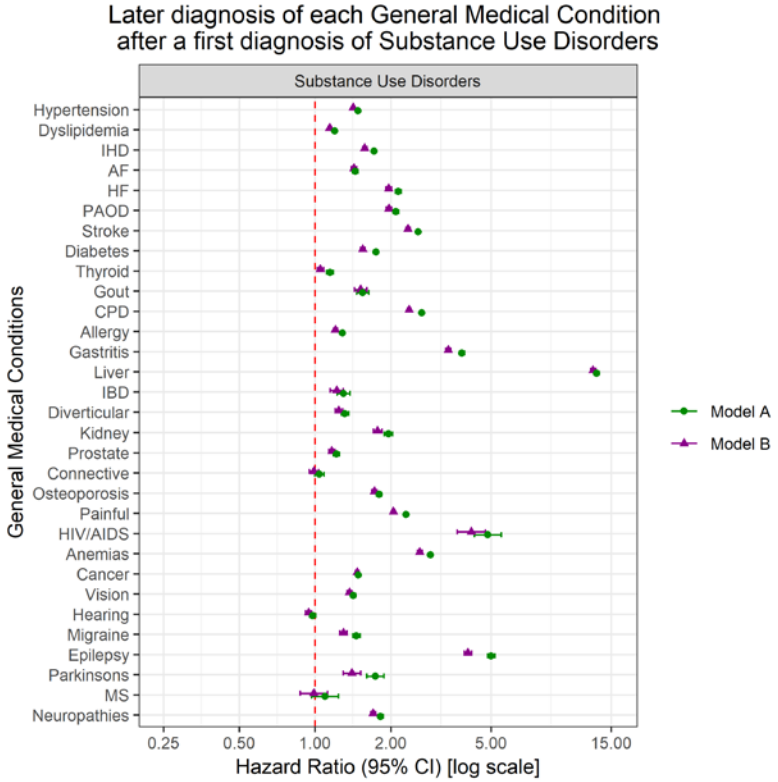


Figure S5. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Schizophrenia

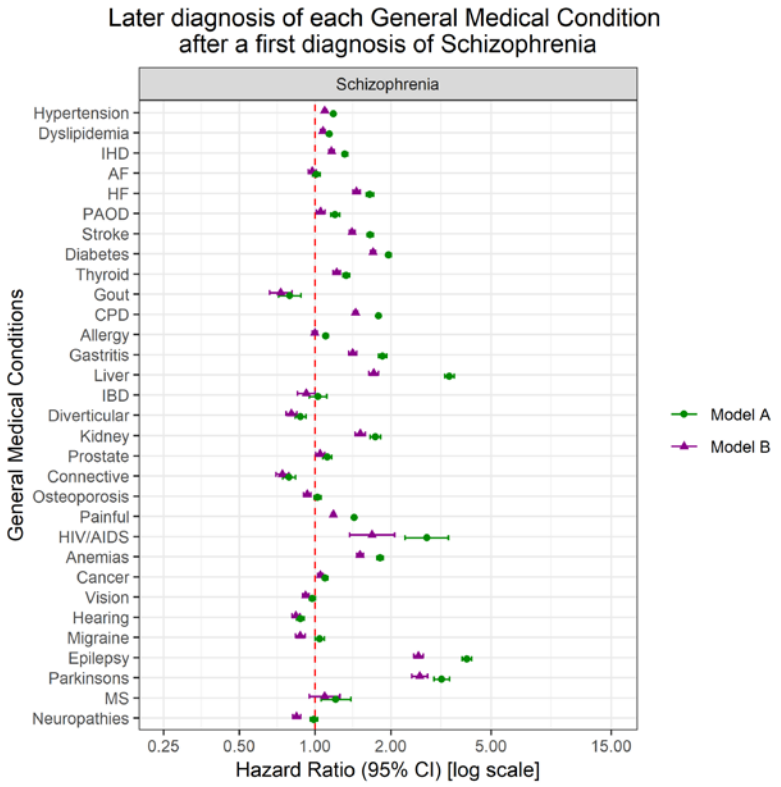


Figure S6. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Mood Disorders

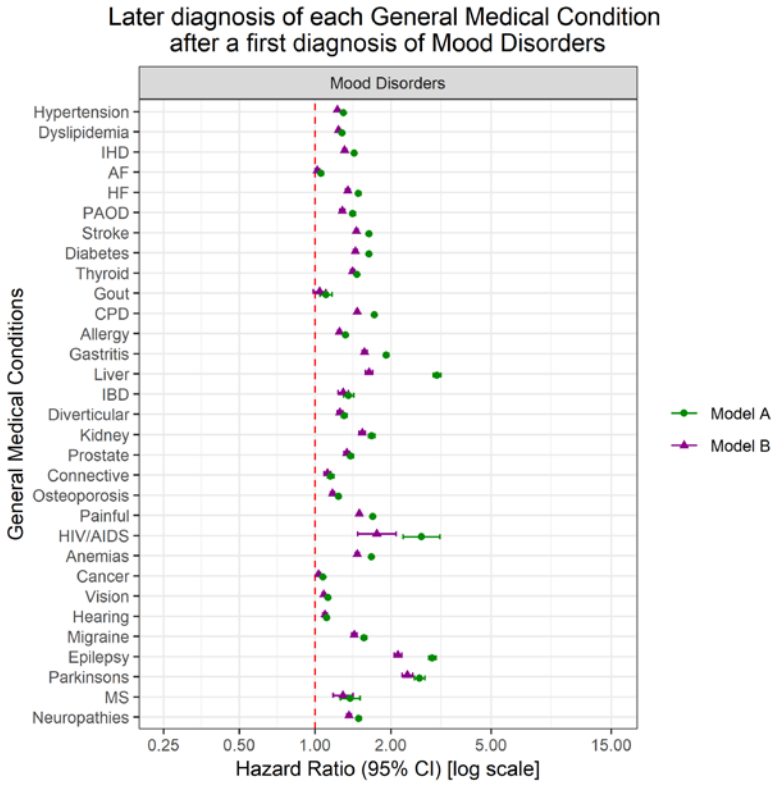


Figure S7. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Neurotic Disorders

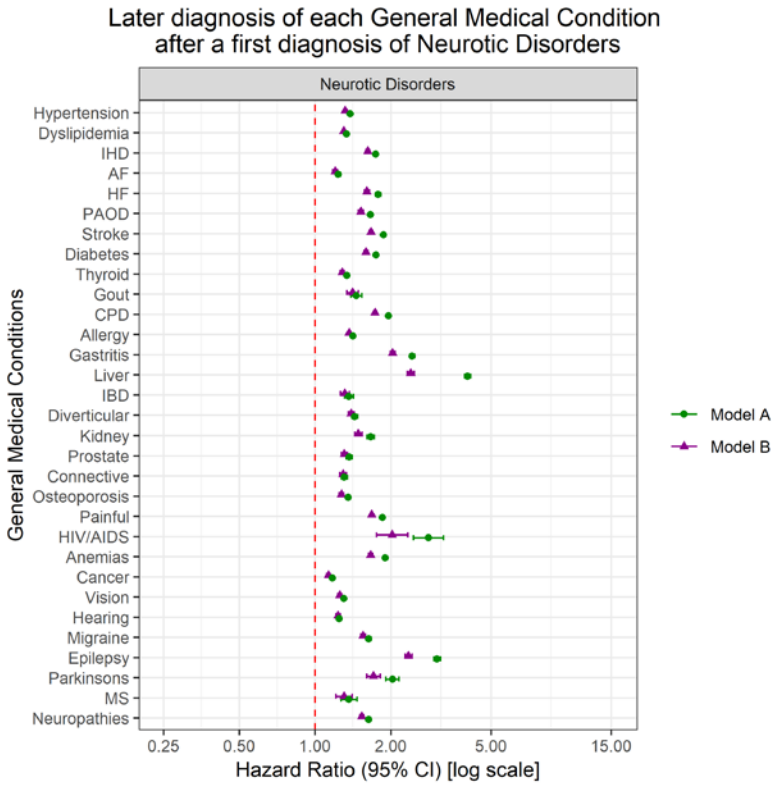


Figure S8. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Eating Disorders

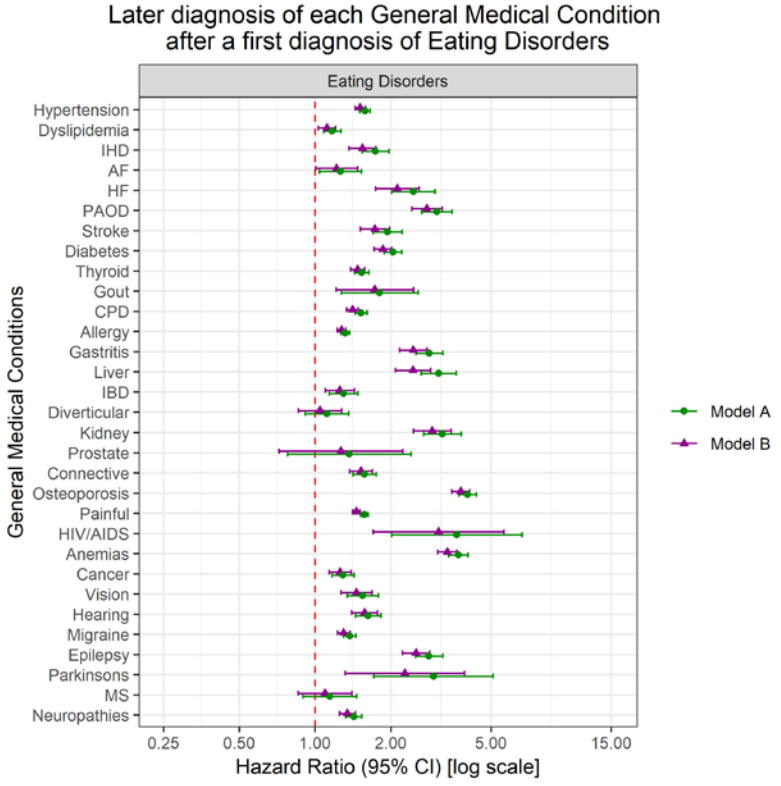


Figure S9. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Personality Disorders

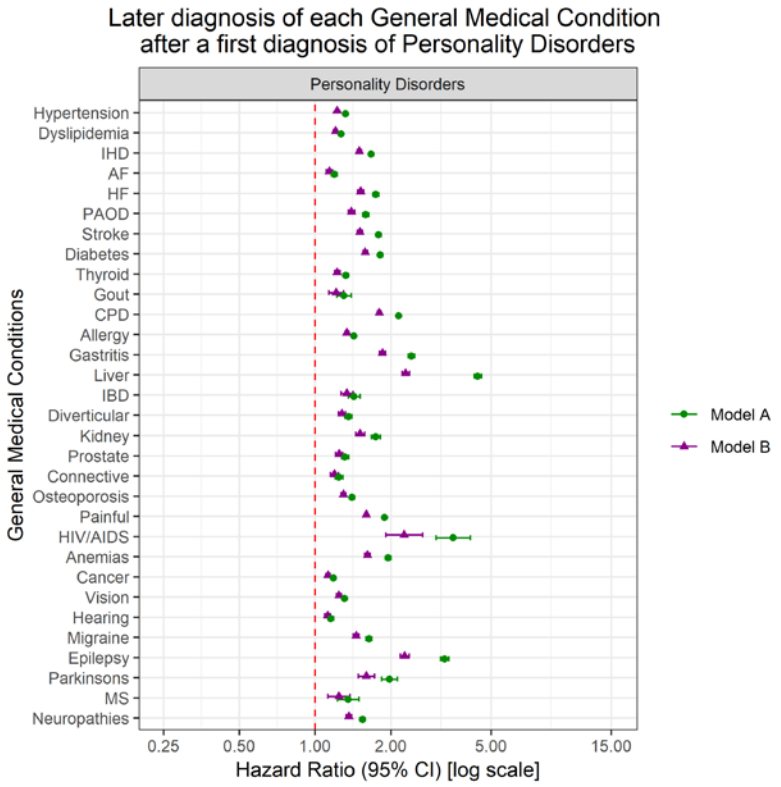


Figure S10. HRs and 95% CIs of being diagnosed with each disorder comparing those with and without a prior diagnosis of Intellectual Disabilities

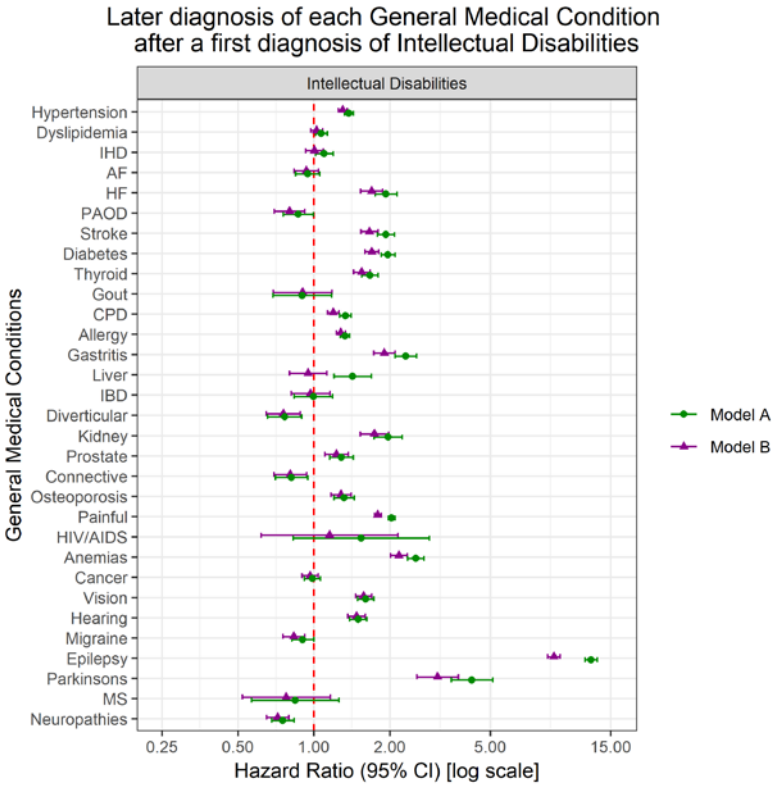


Figure S11. HRs and 95% CIs of being diagnosed with each disorder comparing those with and without a prior diagnosis of Developmental Disorders

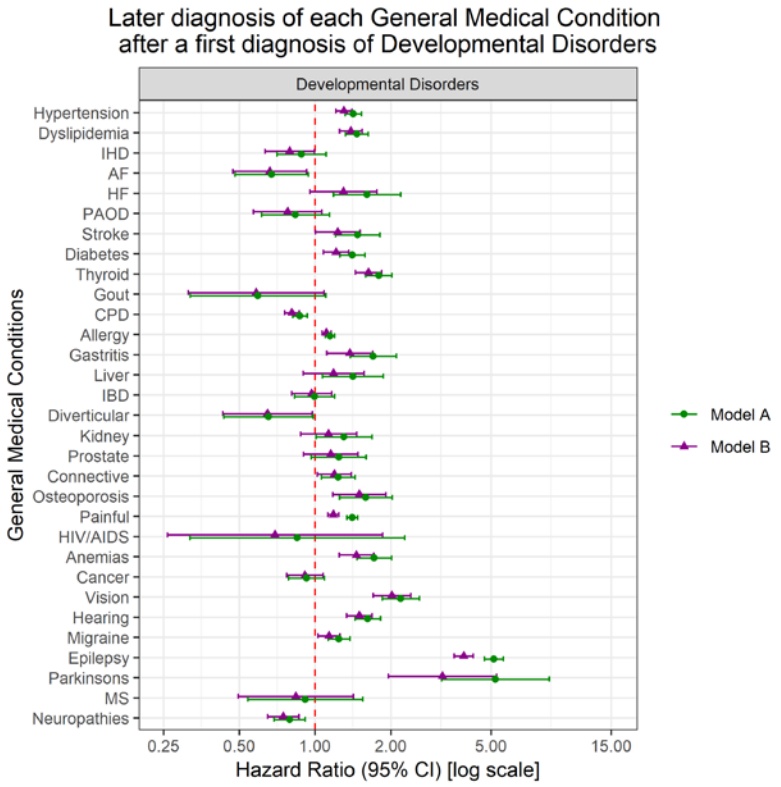


Figure S12. HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Behavioral Disorders

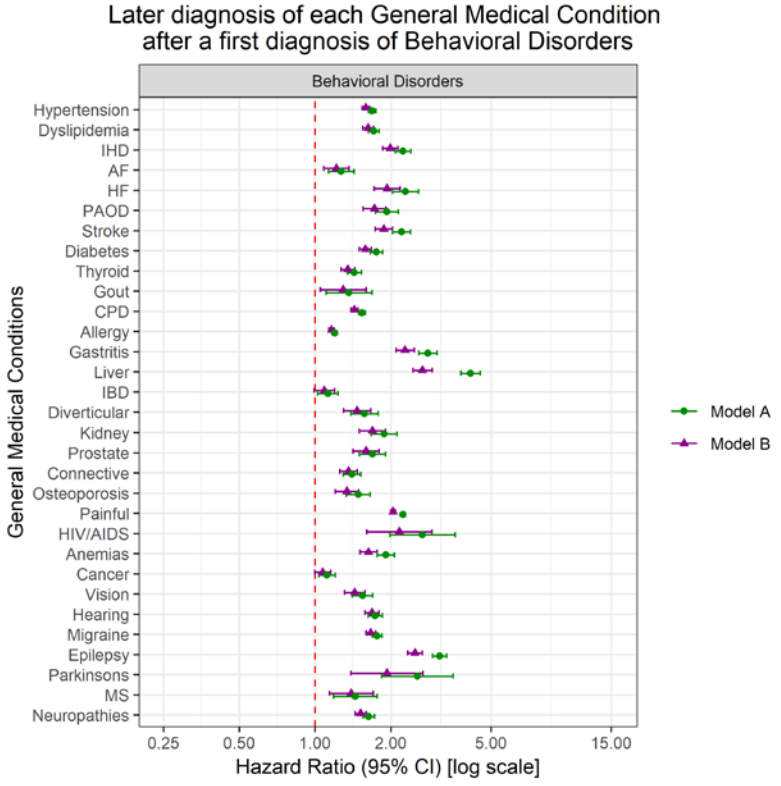


Figure S13. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Organic Disorders

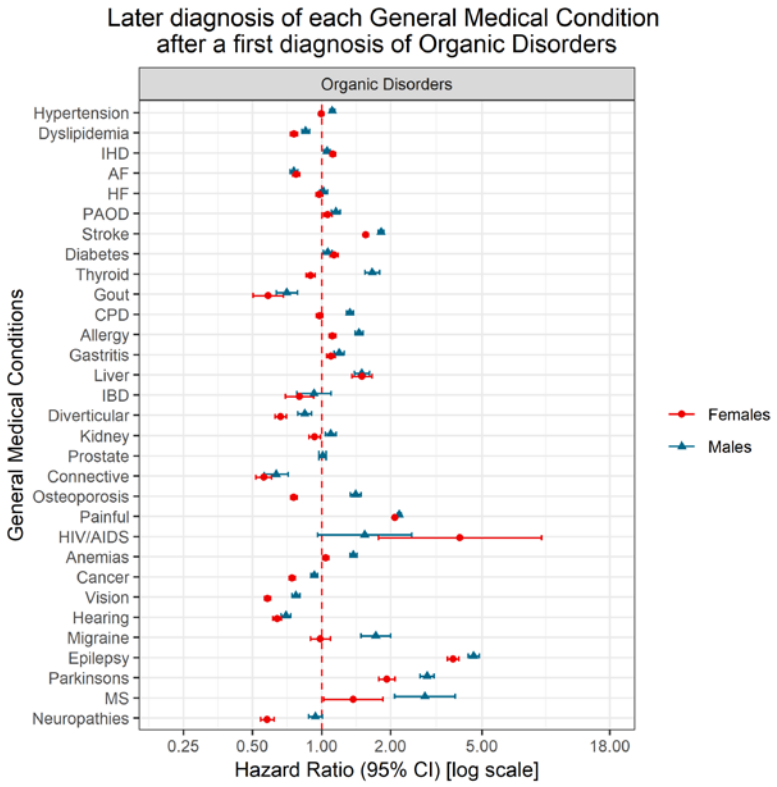


Figure S14. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Substance Use Disorders

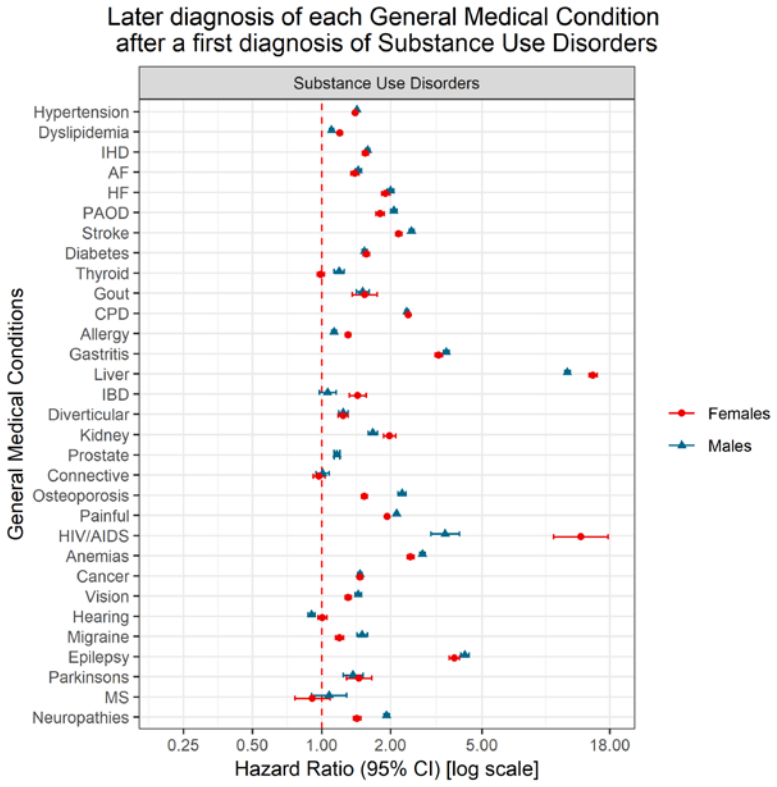


Figure S15. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Schizophrenia

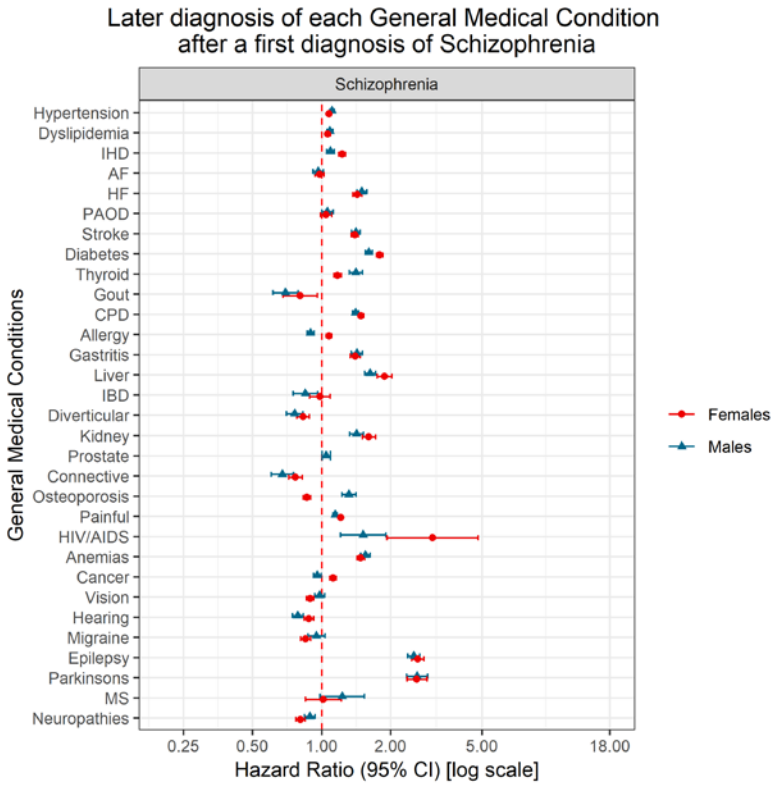


Figure S16. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Mood Disorders

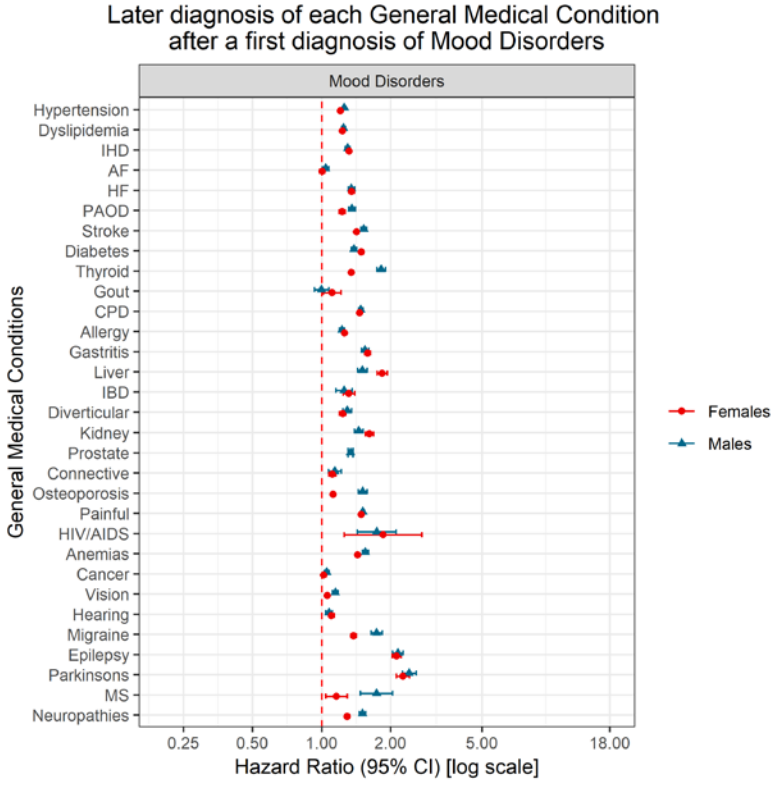


Figure S17. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Neurotic Disorders

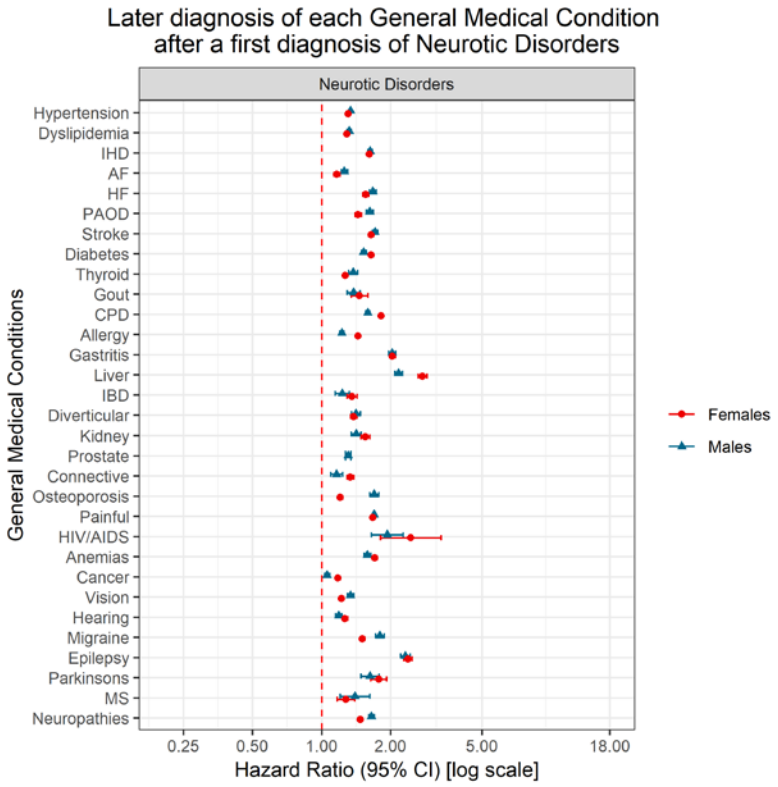


Figure S18. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Eating Disorders

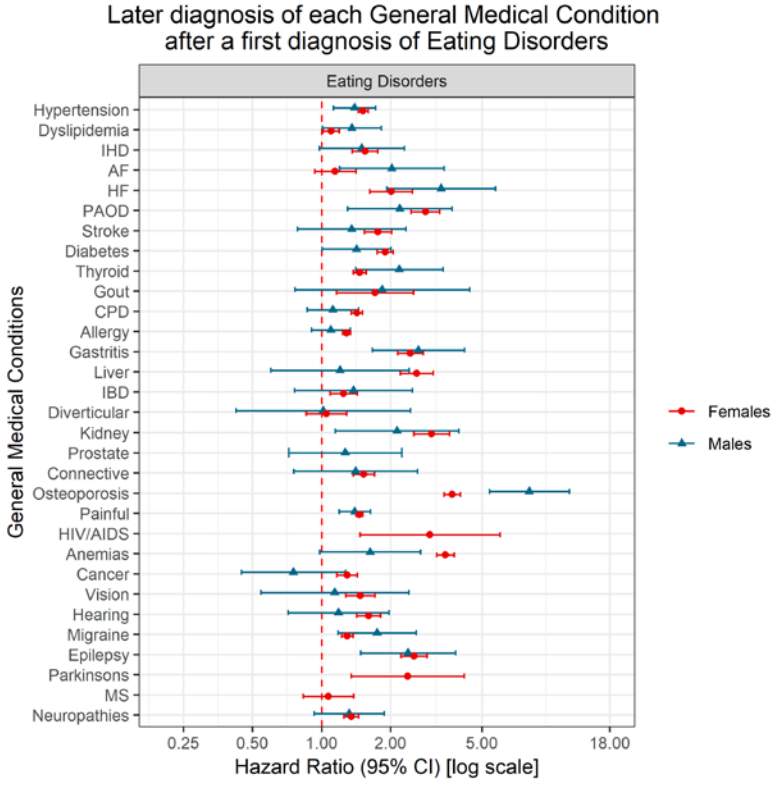


Figure S19. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Personality Disorders

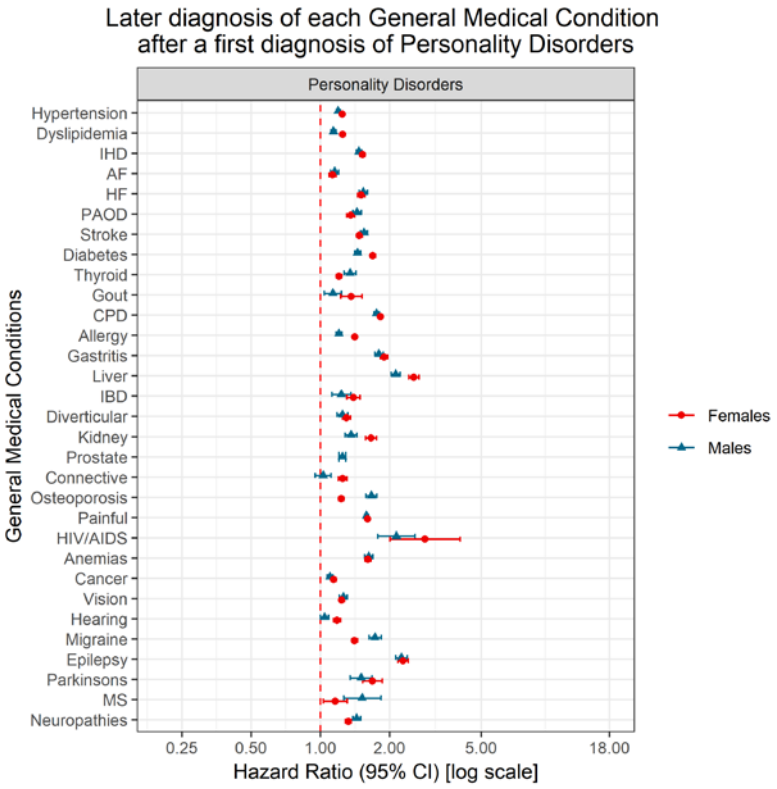


Figure S20. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Intellectual Disabilities

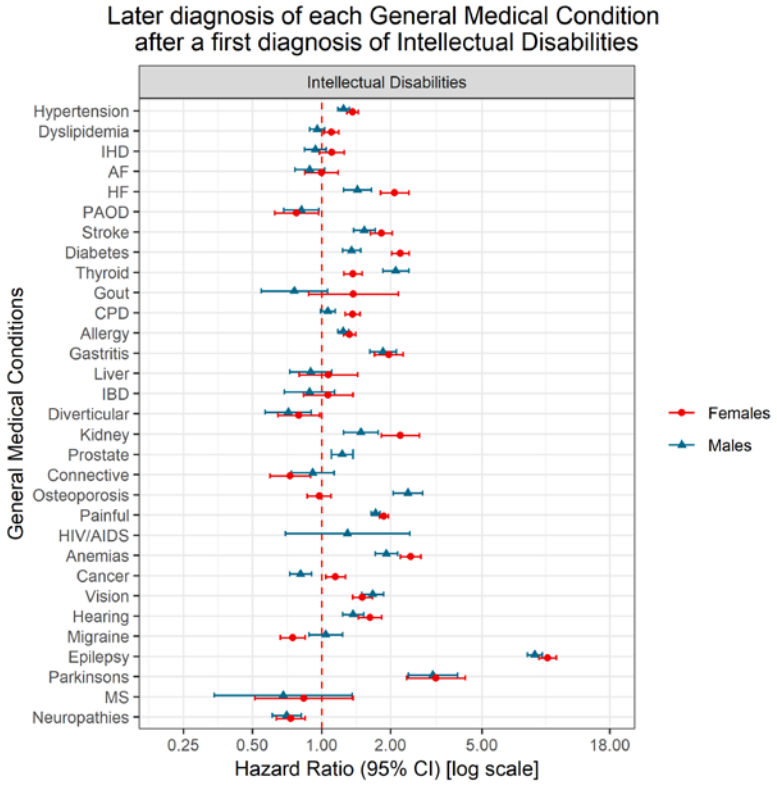


Figure S21. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Developmental Disorders

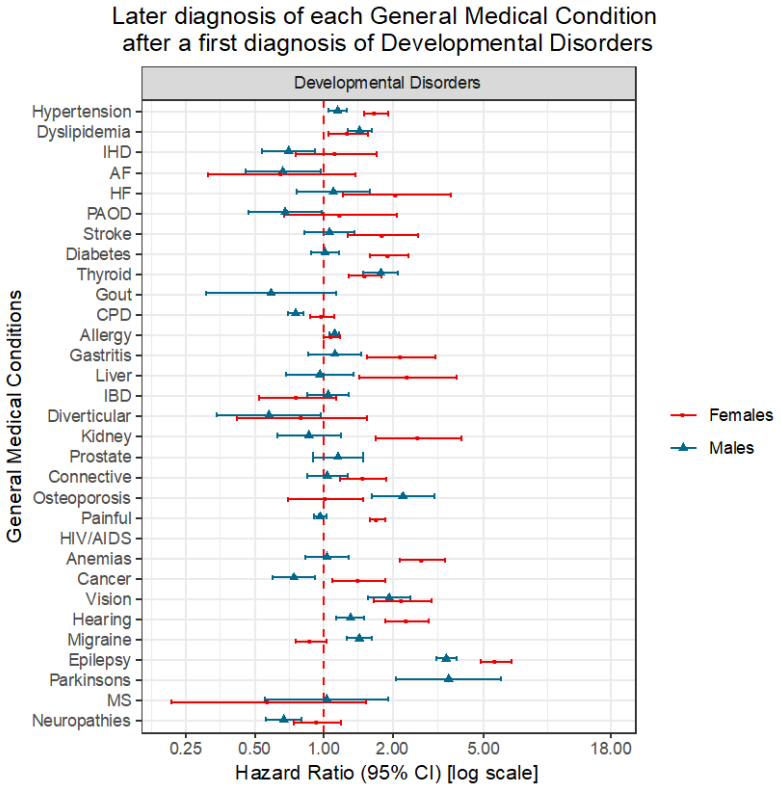
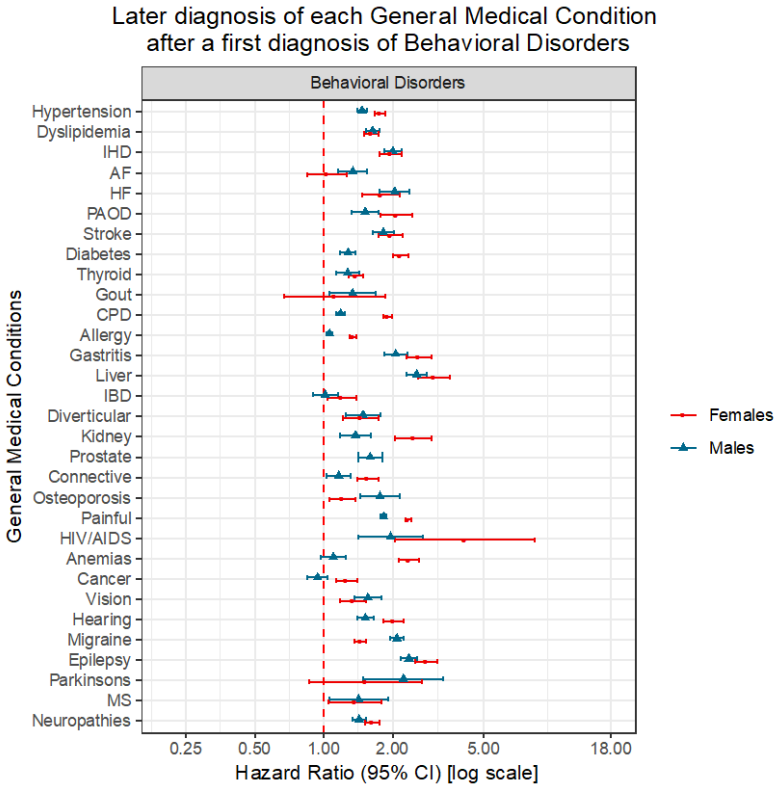


Figure S22. Sex-specific HRs and 95% CIs of being diagnosed with each general medical condition comparing those with and without a prior diagnosis of Behavioral Disorders



Figures S23-S42. Lagged associations for general medical condition categories

The following Figures show the hazard ratios (HRs) of receiving a diagnosis within a general medical condition category, depending on whether individuals had previously been diagnosed with a mental disorder, and depending on time since the first diagnosis of this disorder. Estimates were obtained via Cox proportional hazards models with age as the underlying time scale. The reference category are persons without a diagnosis of the mental disorder. The line of unity is shown as a red dashed line in each plot. Graphs of estimates are shown with variable (differing for each set of graphs) y-axes. Estimates with fewer than four exposed cases are not shown.

Displaying estimates for Model A (green points; adjusting for sex and calendar time) and Model B (purple triangles; further adjustment for other mental disorders that had onset prior to the mental disorder of interest)

The y-axis varies for each graph, however they range from a minimum of 0.2 to a maximum of 15

S23. Organic Disorders
S24. Substance Use Disorders
S25. Schizophrenia
S26. Mood Disorders
S27. Neurotic Disorders
S28. Eating Disorders
S29. Personality Disorders
S30. Intellectual Disorders
S31. Developmental Disorders
S32. Behavioral Disorders

Displaying Model B estimates for males (blue triangles) and females (red points)

The y-axis varies for each graph, however they range from a minimum of 0.2 to a maximum of 40

S33. Organic Disorders
S34. Substance Use Disorders
S35. Schizophrenia
S36. Mood Disorders
S37. Neurotic Disorders
S38. Eating Disorders
S39. Personality Disorders
S40. Intellectual Disorders
S41. Developmental Disorders
S42. Behavioral Disorders

eFigureS23. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Organic Disorders, depending on time since first diagnosis

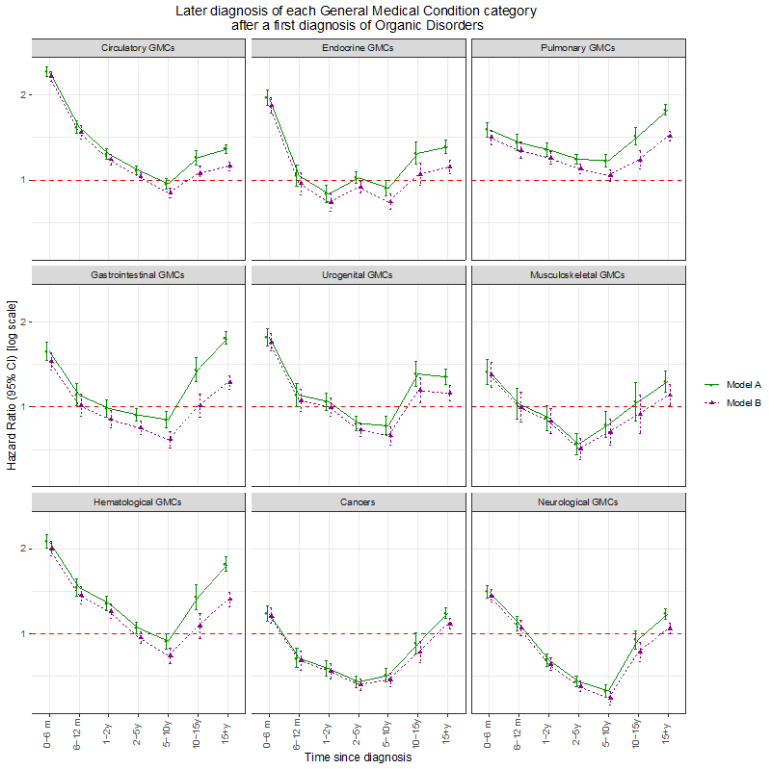


Figure S24. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Substance Use Disorders, depending on time since first diagnosis

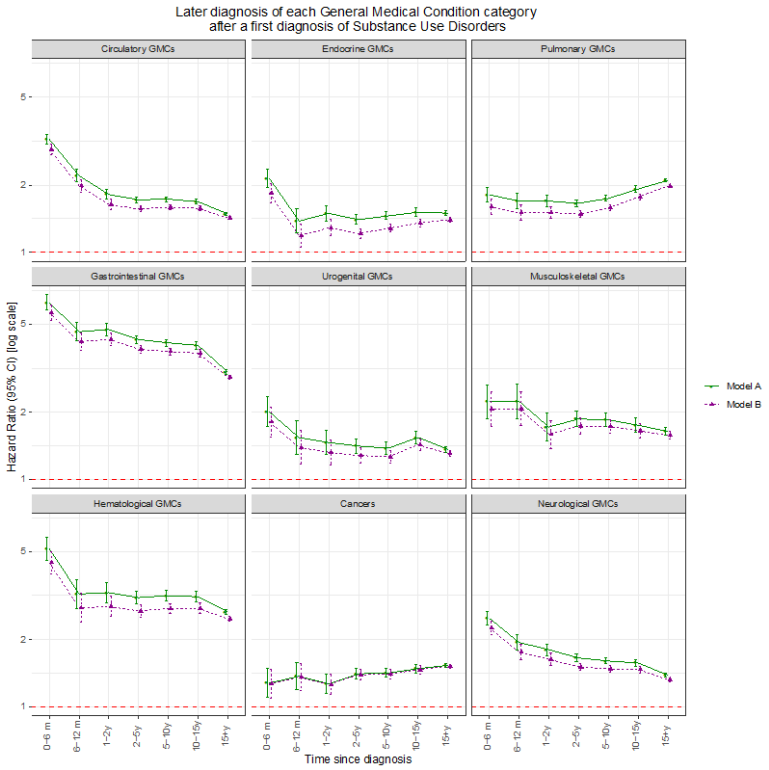


Figure S25. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Schizophrenia, depending on time since first diagnosis

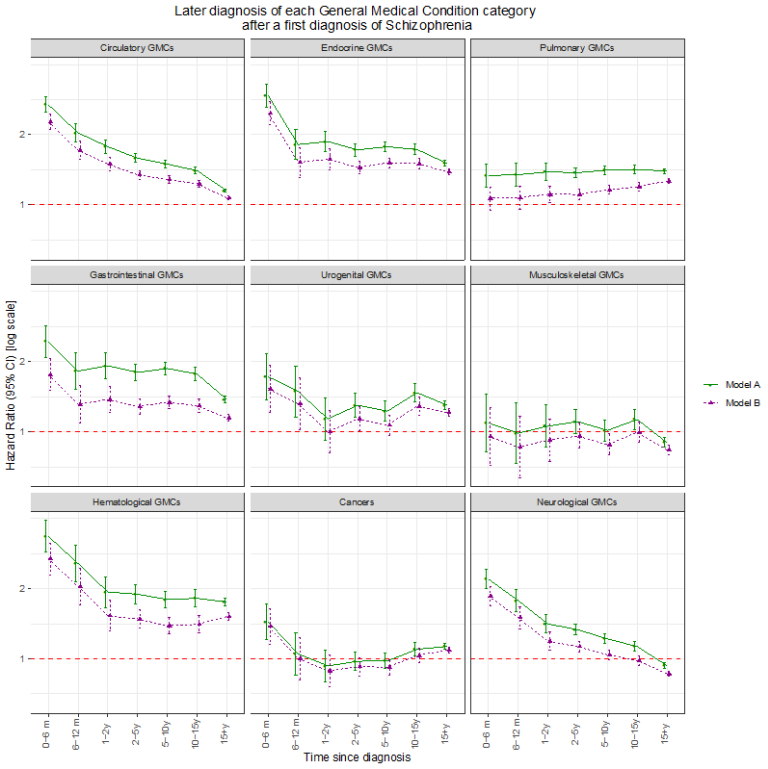


Figure S26. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Mood Disorders, depending on time since first diagnosis

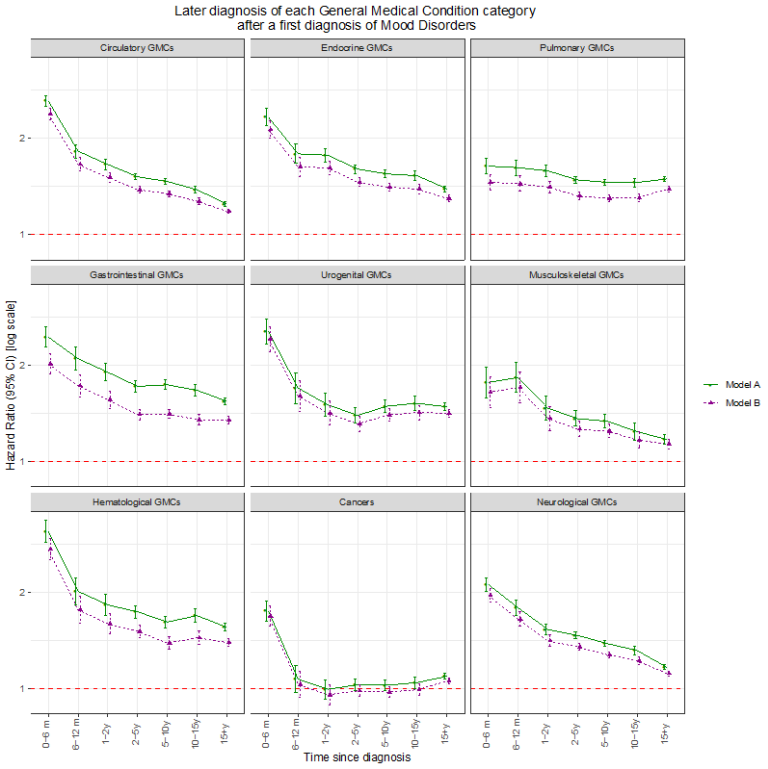


Figure S27. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Neurotic Disorders, depending on time since first diagnosis

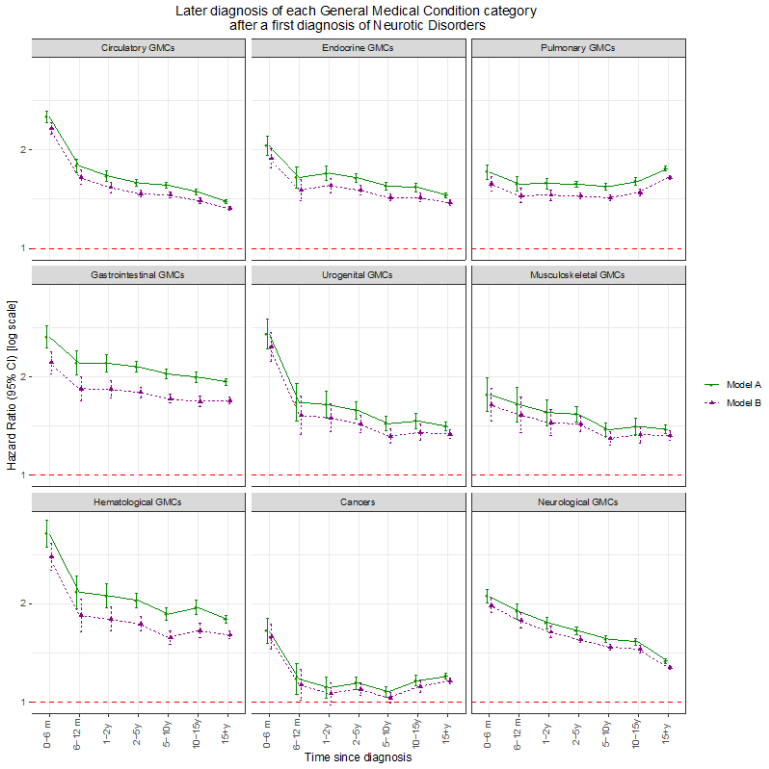


Figure S28. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Eating Disorders, depending on time since first diagnosis

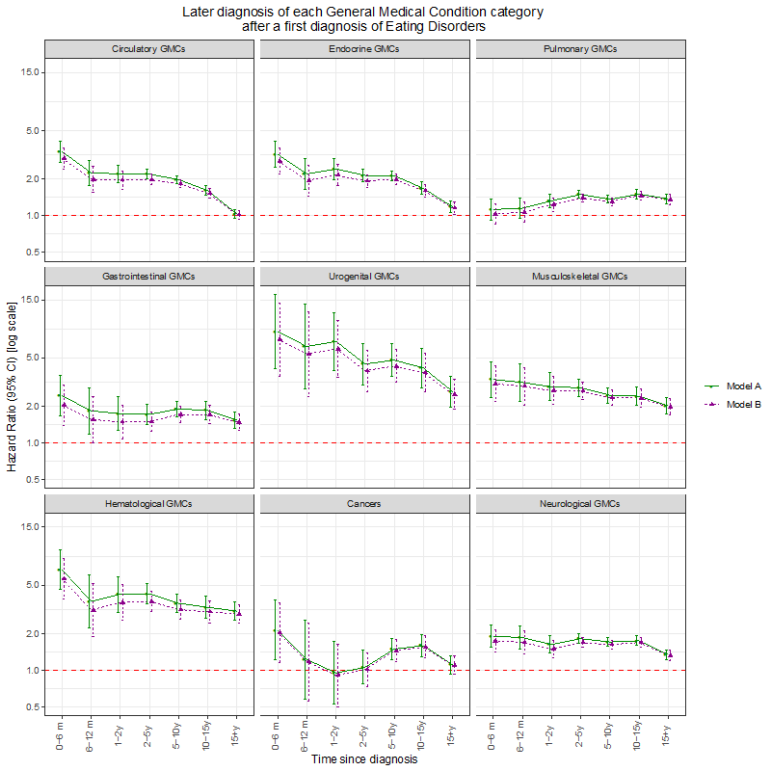


Figure S29. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Personality Disorders, depending on time since first diagnosis

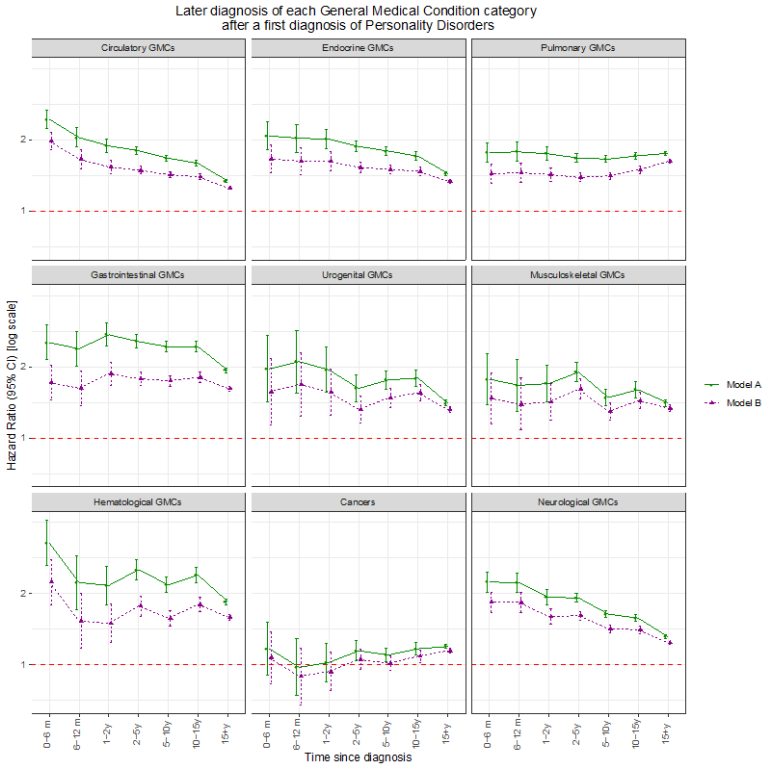


Figure S30. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Intellectual Disabilities, depending on time since first diagnosis

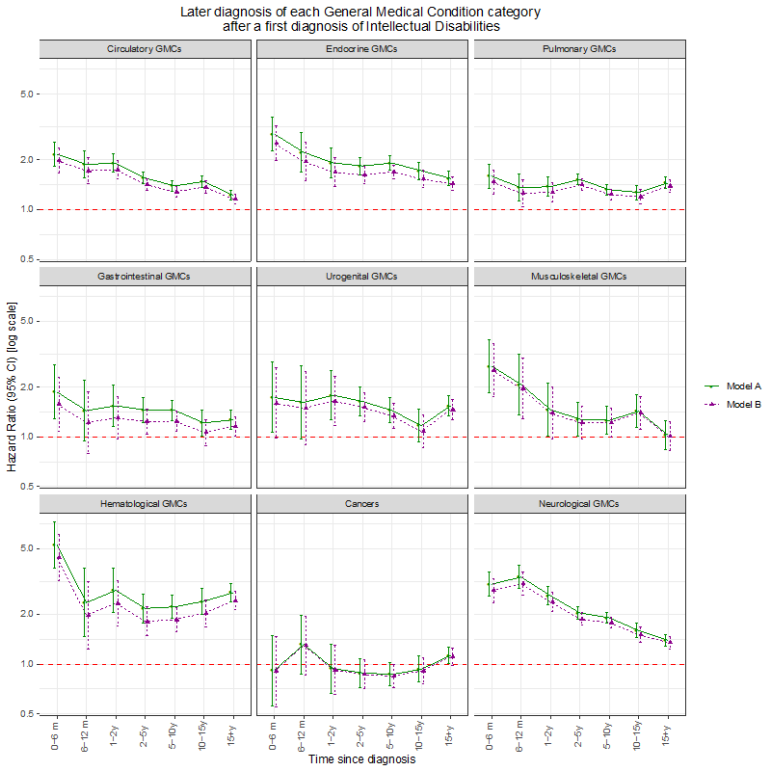


Figure S31. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Developmental Disorders, depending on time since first diagnosis

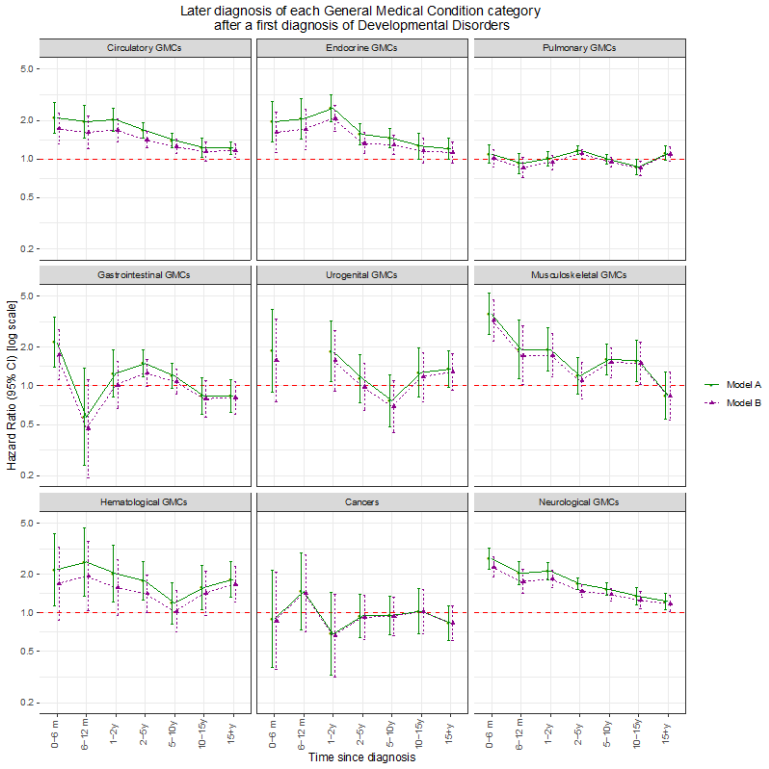


Figure S32. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Behavioral Disorders, depending on time since the first diagnosis

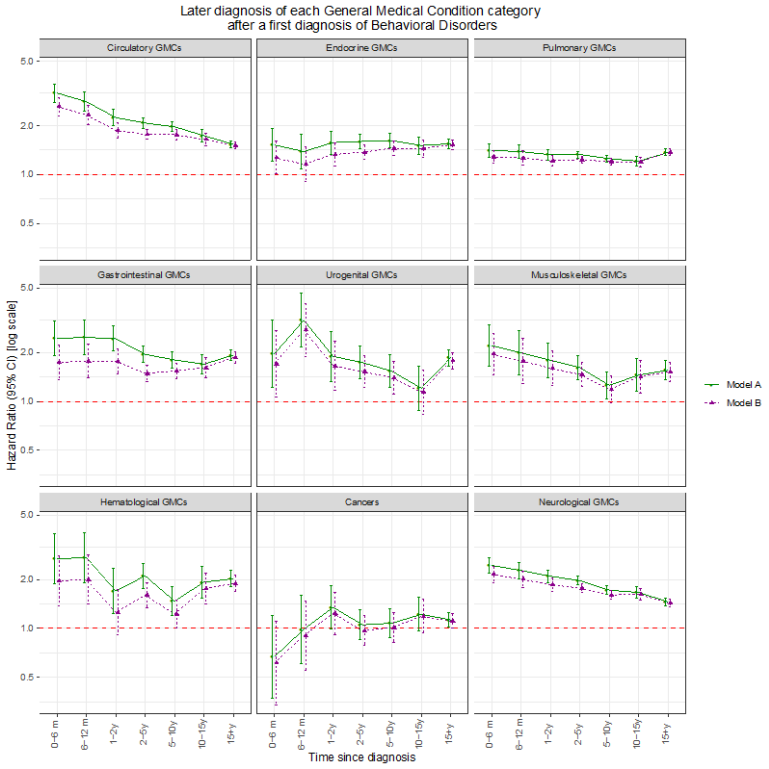


Figure S33. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Organic Disorders, depending on time since first diagnosis

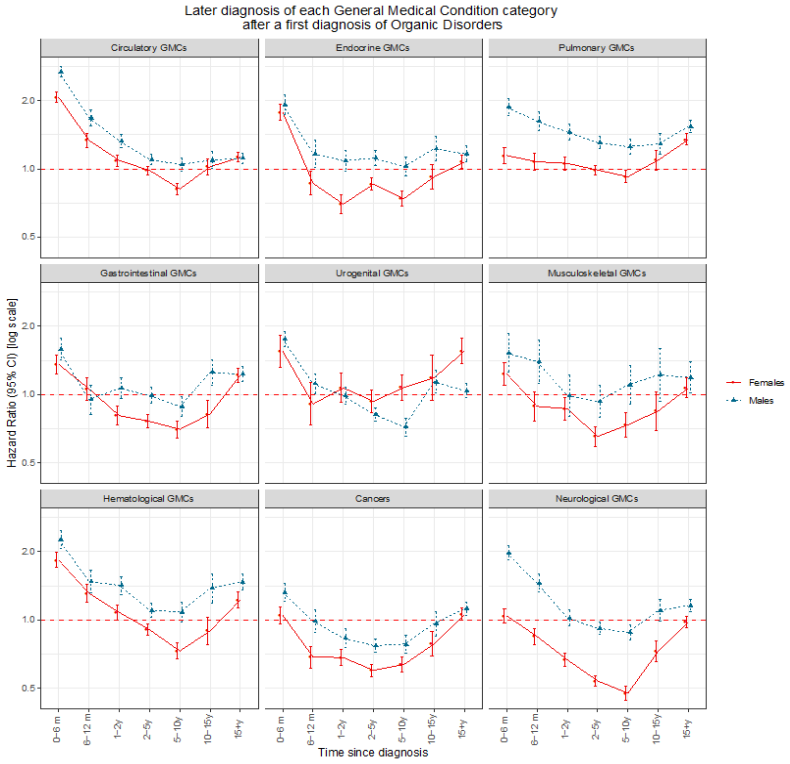


Figure S34. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Substance Use Disorders, depending on time since first diagnosis

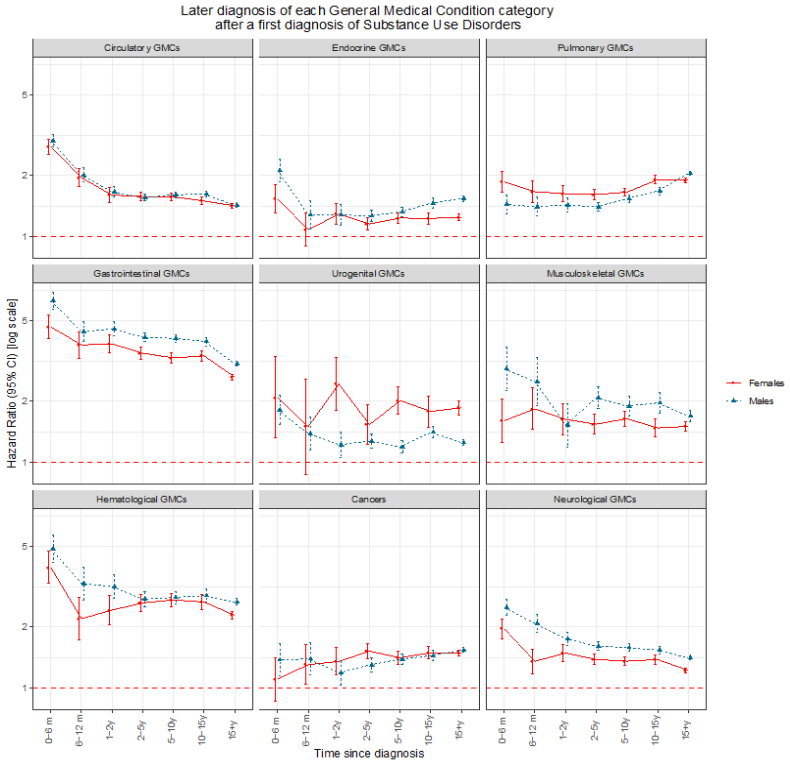


Figure S35. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Schizophrenia, depending on time since first diagnosis

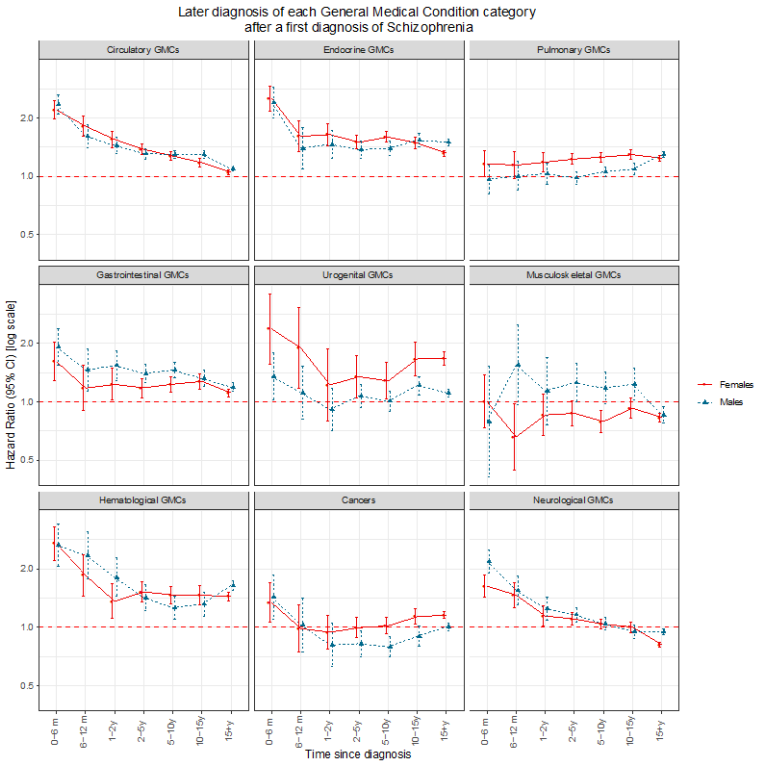


Figure S36 Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Mood Disorders, depending on time since first diagnosis

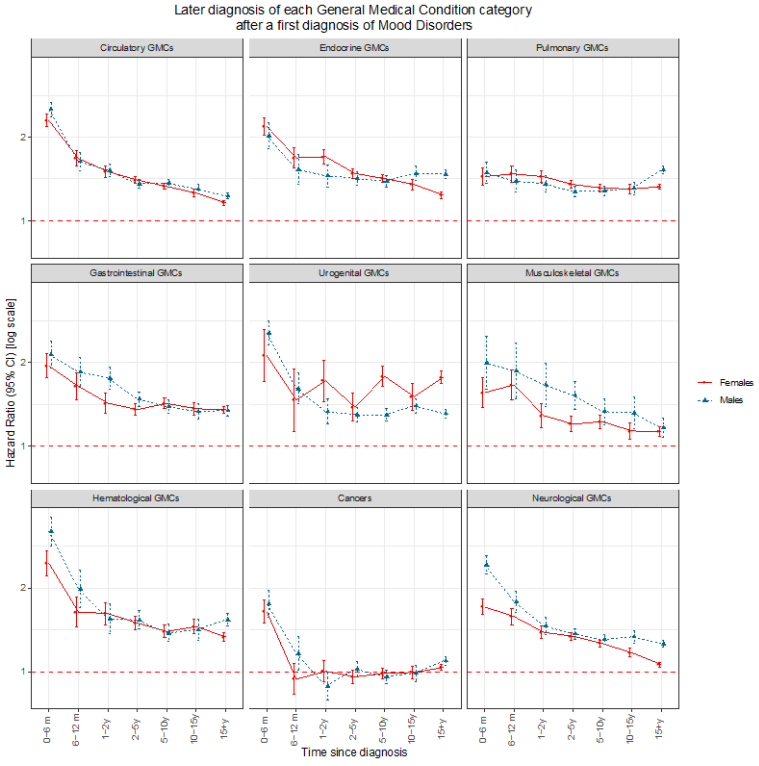


Figure S37. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Neurotic Disorders, depending on time since first diagnosis

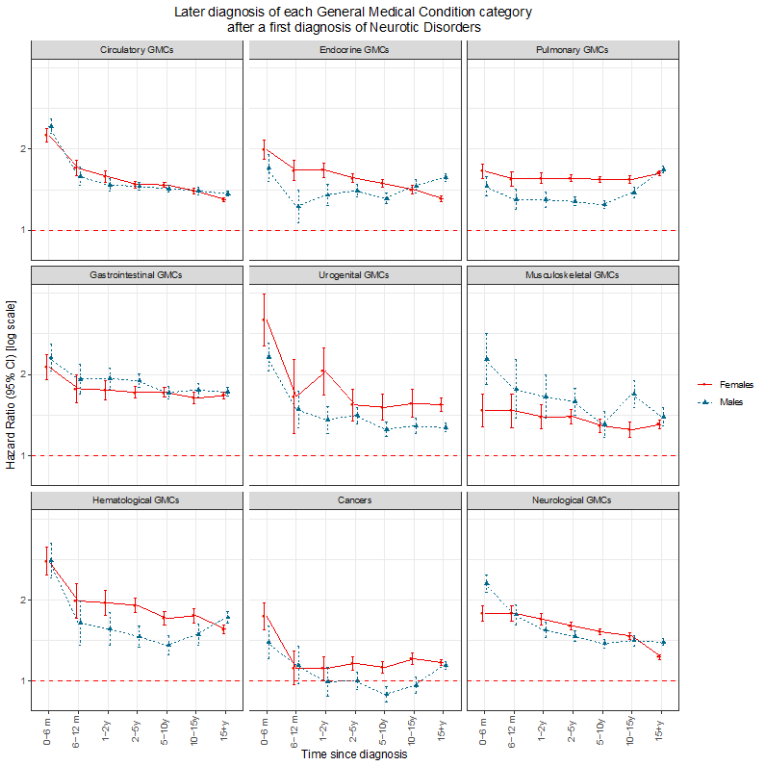


Figure S38. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Eating Disorders, depending on time since first diagnosis

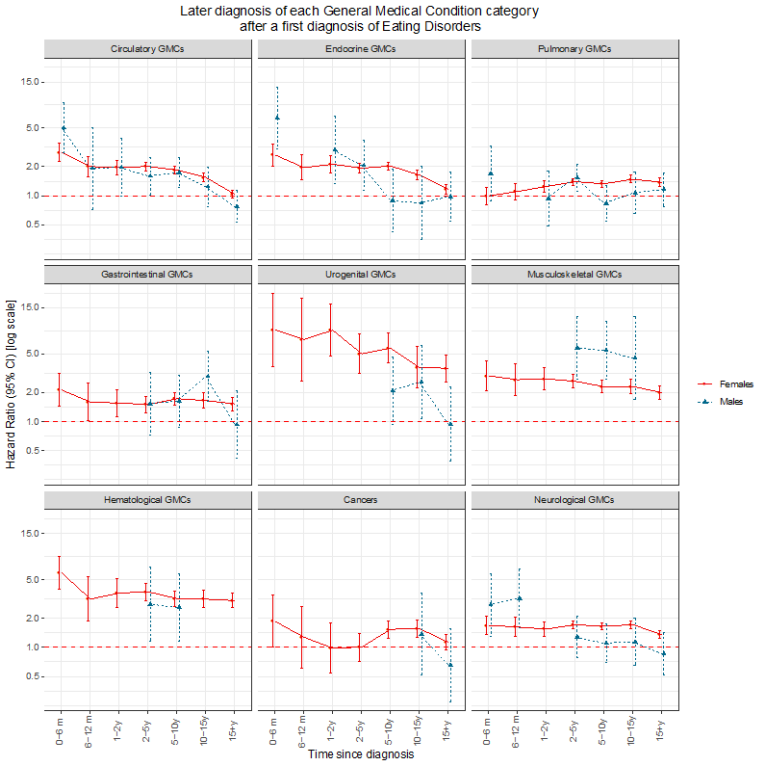


Figure S39. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Personality Disorders, depending on time since first diagnosis

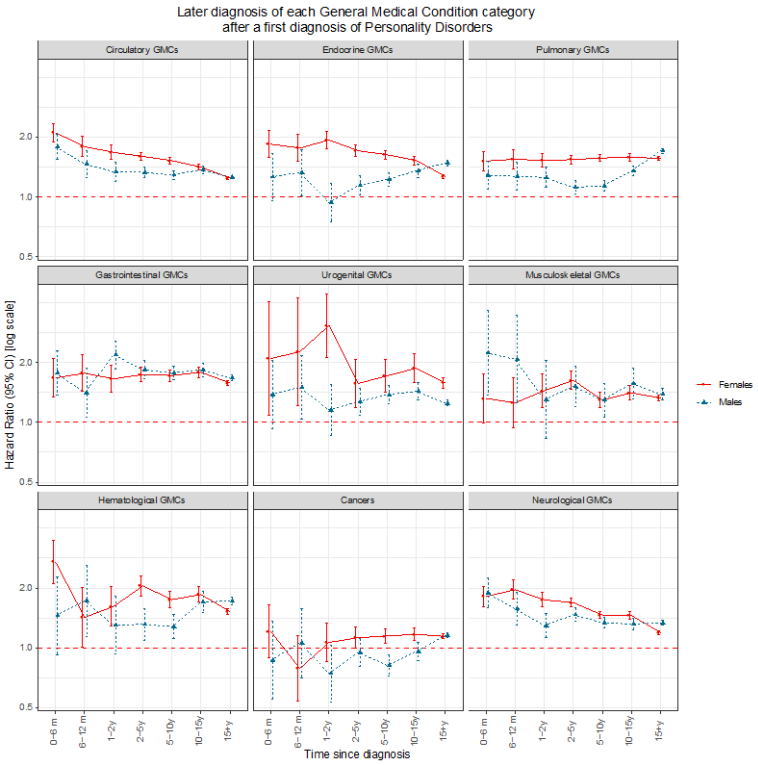


Figure S40. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Intellectual Disabilities, depending on time since first diagnosis

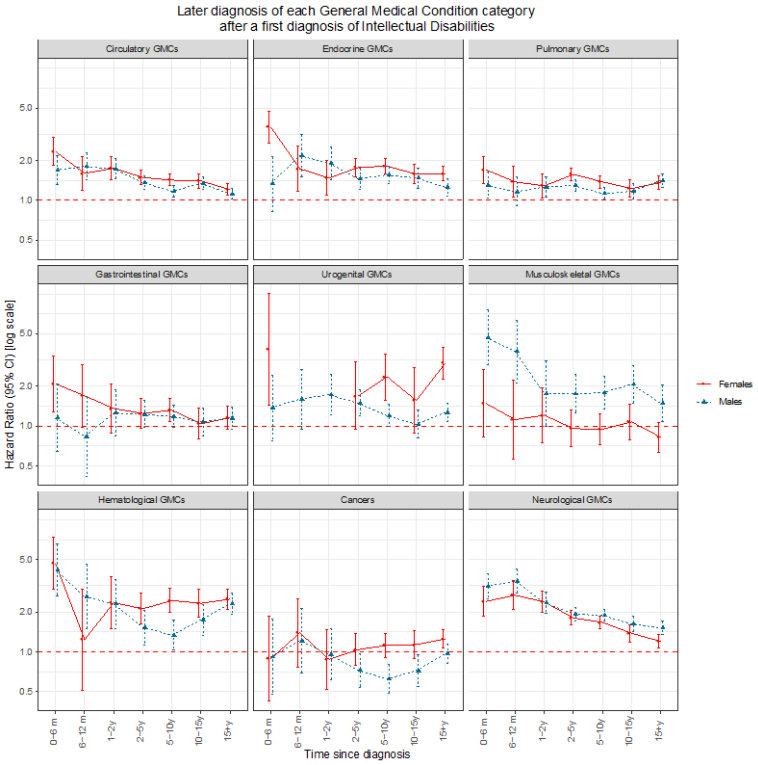


Figure S41. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Developmental Disorders, depending on time since first diagnosis

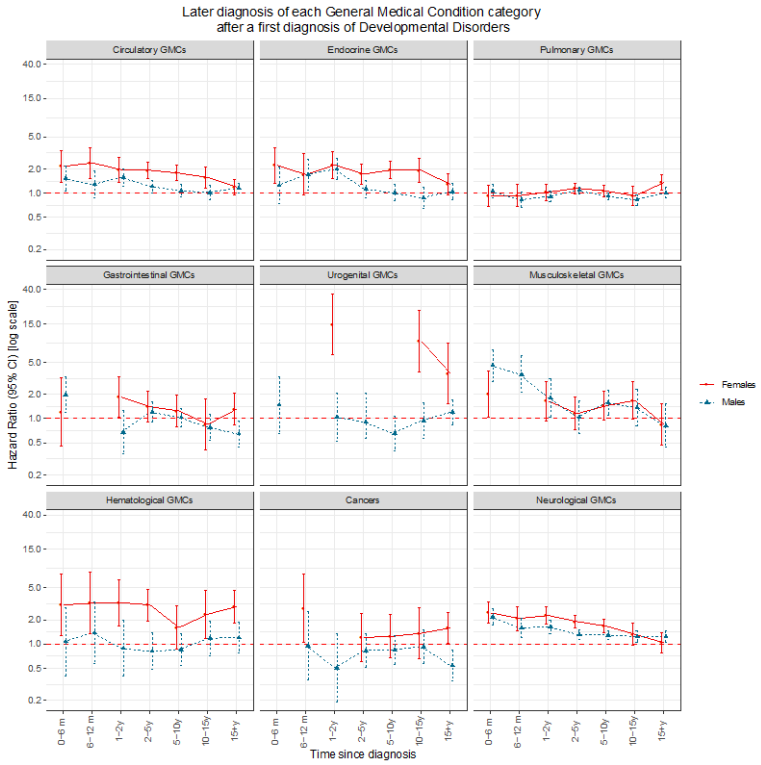
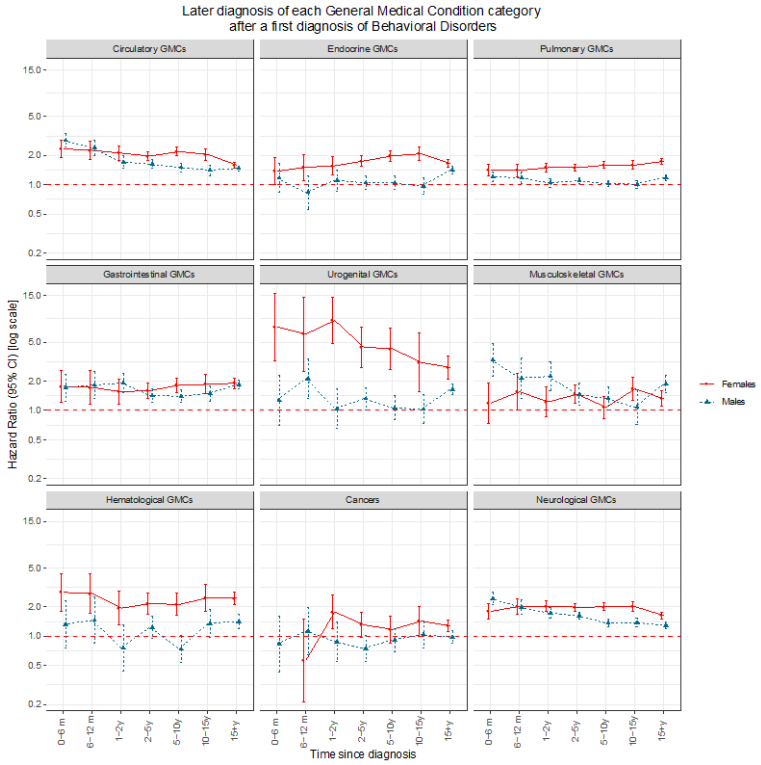


Figure S42. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Behavioral Disorders, depending on time since first diagnosis



Figures S43-S62. Lagged associations for specific general medical conditions

The following Figures show the hazard ratios (HRs) of receiving a diagnosis of a general medical condition, organized by categories, depending on whether individuals had been previously diagnosed with a mental disorder, and depending on time since the first diagnosis of this disorder. Estimates were obtained via Cox proportional hazards models with age as the underlying time scale. The reference category are persons without a diagnosis of the prior-disorder. The line of unity is shown as a red dashed line in each plot. Graphs of estimates are shown with variable (differing for each graphs) y-axes. Estimates with fewer than four exposed cases are not shown.

Displaying estimates for Model A (green points; adjusting for sex and calendar time) and Model B (purple triangles; further adjustment for other mental disorders that had onset prior to the mental disorder of interest)

The y-axis varies for each graph, however they range from a minimum of 0.15 to a maximum of 41

S43. Organic Disorders
S44. Substance Use Disorders
S45. Schizophrenia
S46. Mood Disorders
S47. Neurotic Disorders
S48. Eating Disorders
S49. Personality Disorders
S50. Intellectual Disorders
S51. Developmental Disorders
S52. Behavioral Disorders

Displaying Model B estimates for males (blue triangles) and females (red points)

The y-axis varies for each graph, however they range from a minimum of 0.07 to a maximum of 43

S53. Organic Disorders
S54. Substance Use Disorders
S55. Schizophrenia
S56. Mood Disorders
S57. Neurotic Disorders
S58. Eating Disorders
S59. Personality Disorders
S60. Intellectual Disorders
S61. Developmental Disorders
S62. Behavioral Disorders

Figures S43.1-S43.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Organic Disorders, depending on time since first diagnosis

Figure S43.1 - Circulatory Conditions

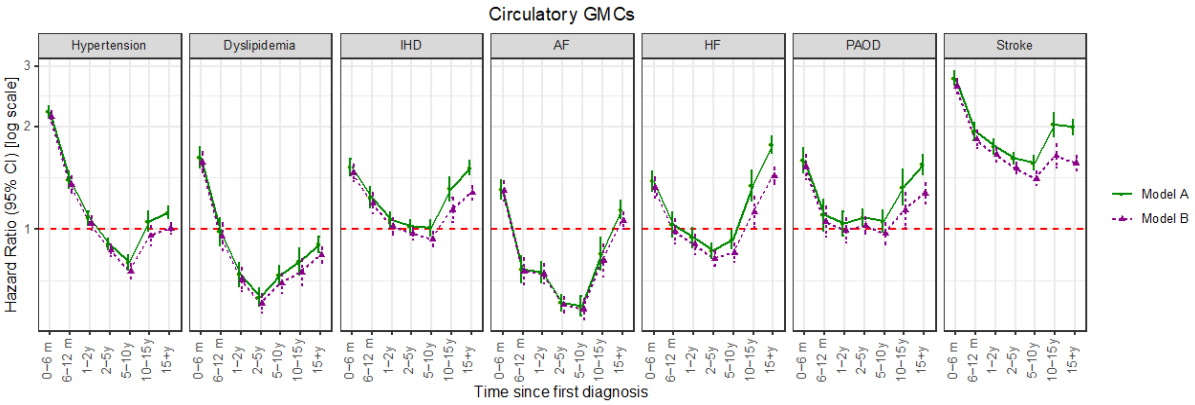


Figure S43.2 - Endocrine Conditions

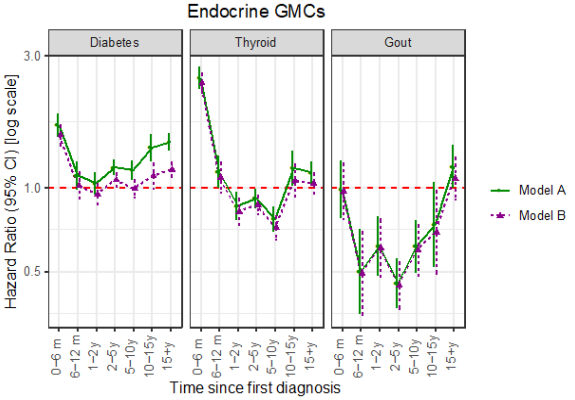


Figure S43.3 - Pulmonary Conditions

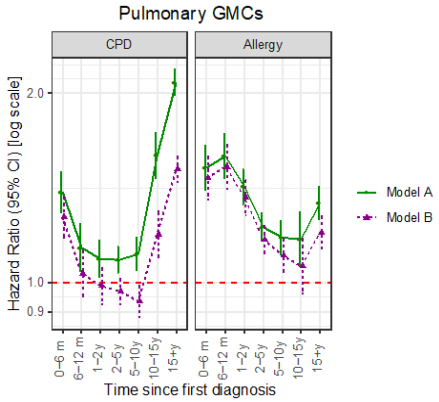


Figure S43.4 - Gastrointestinal Conditions

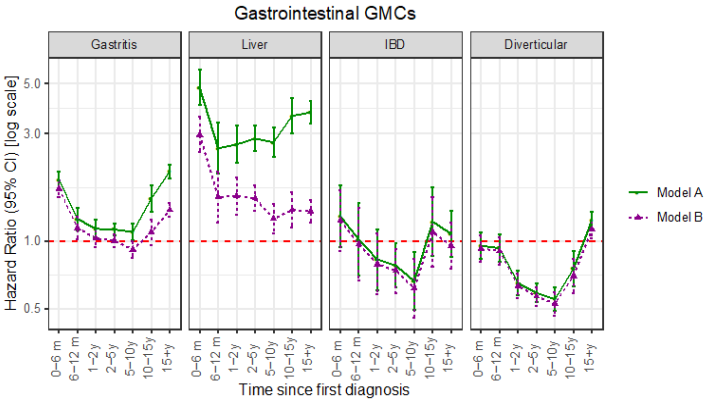


Figure S43.5 - Urogenital Conditions

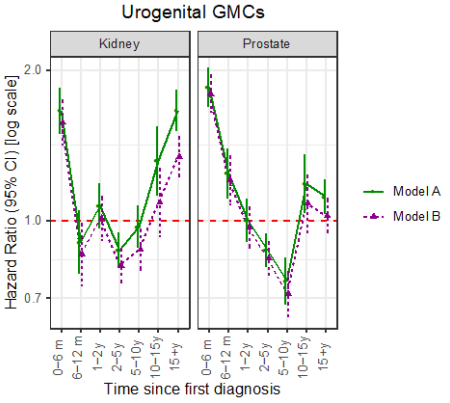


Figure S43.6 - Musculoskeletal Conditions

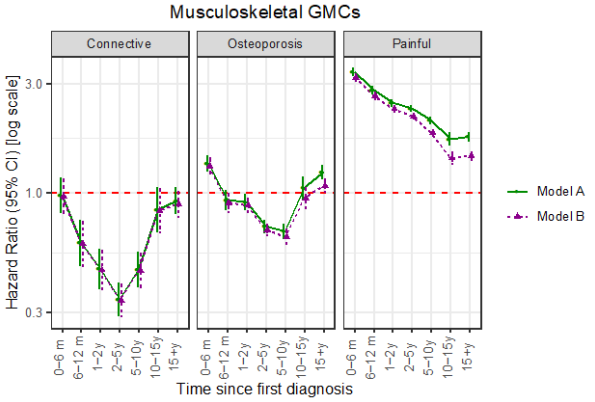


Figure S43.7 - Hematological Conditions

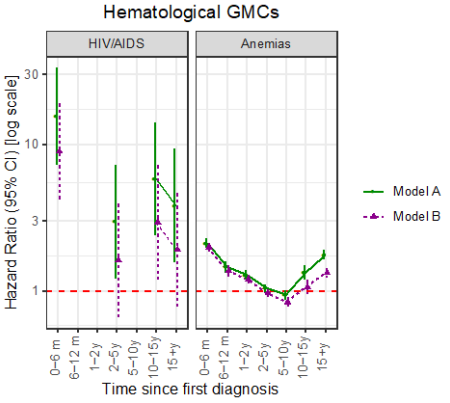


Figure S43.8 - Cancer

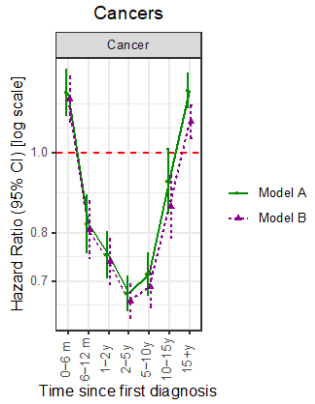
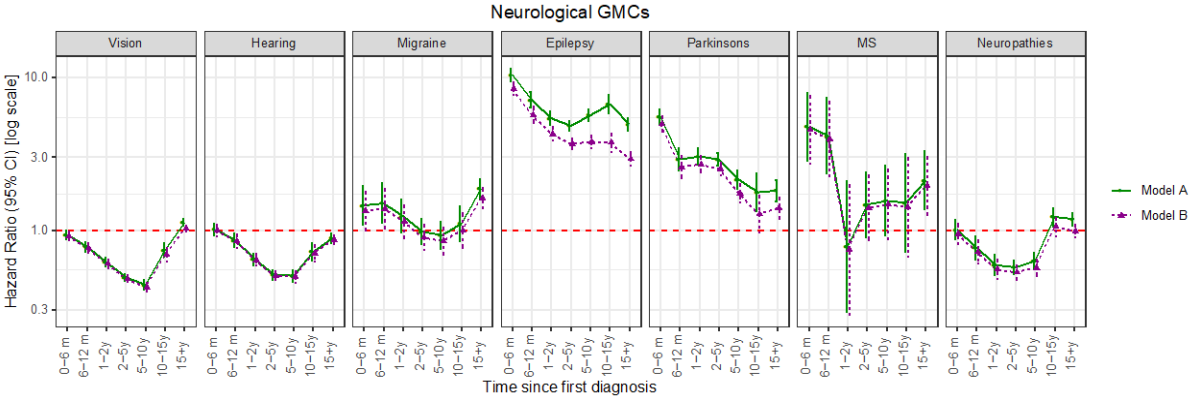


Figure S43.9 - Neurological Conditions



Figures S44.1-S44.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Substance Use Disorders, depending on time since first diagnosis

Figure S44.1 - Circulatory Conditions

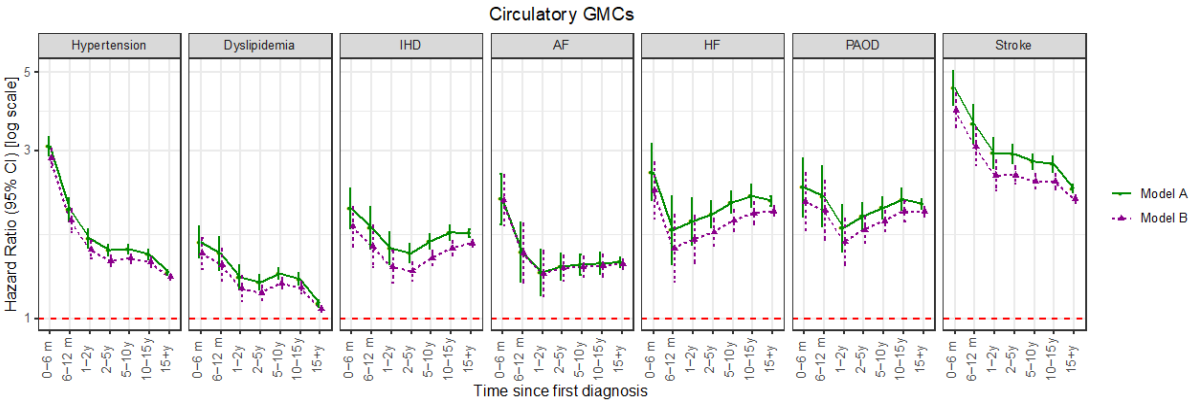


Figure S44.2 - Endocrine Conditions

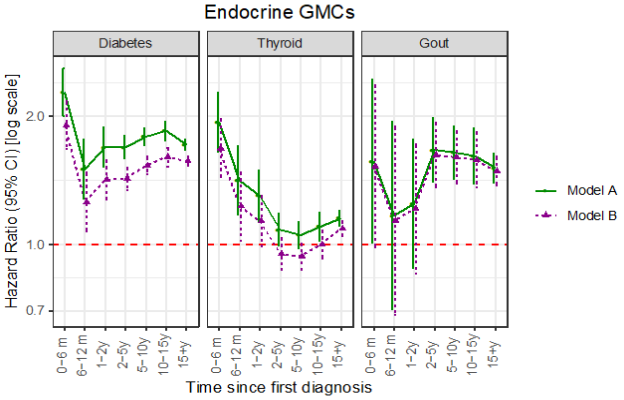


Figure S44.3 - Pulmonary Conditions

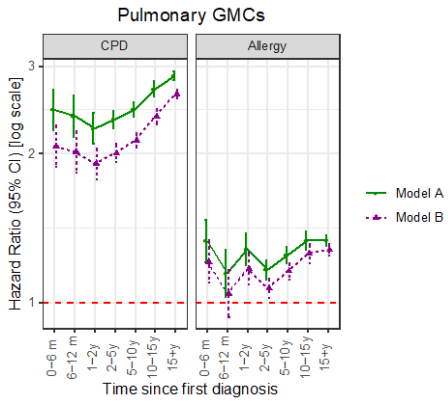


Figure S44.4 - Gastrointestinal Conditions

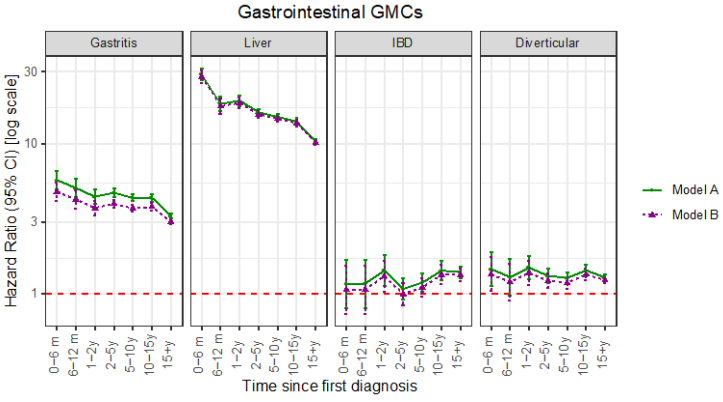


Figure S44.5 - Urogenital Conditions

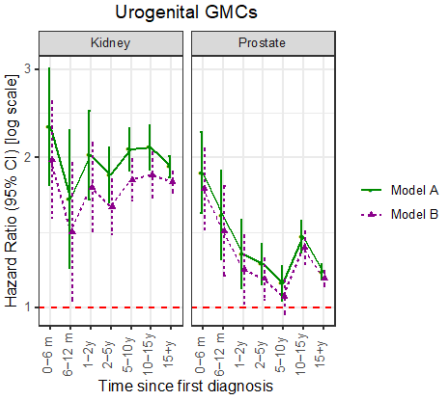


Figure S44.6 - Musculoskeletal Conditions

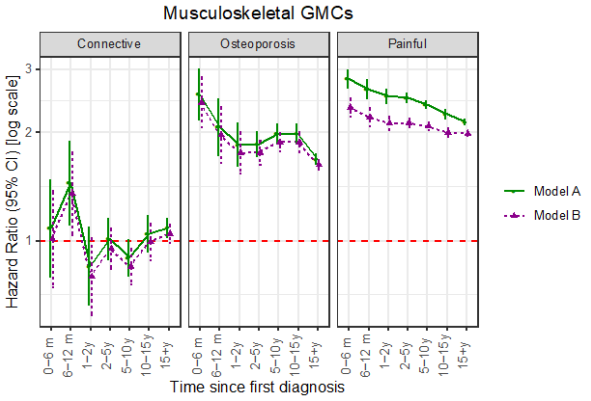


Figure S44.7 - Hematological Conditions

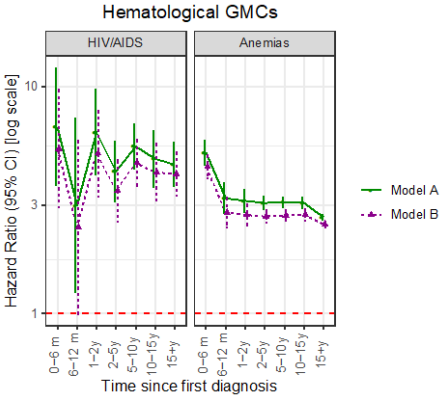


Figure S44.8 - Cancer

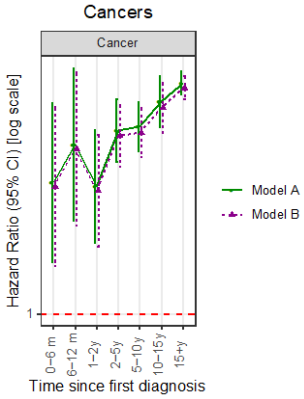
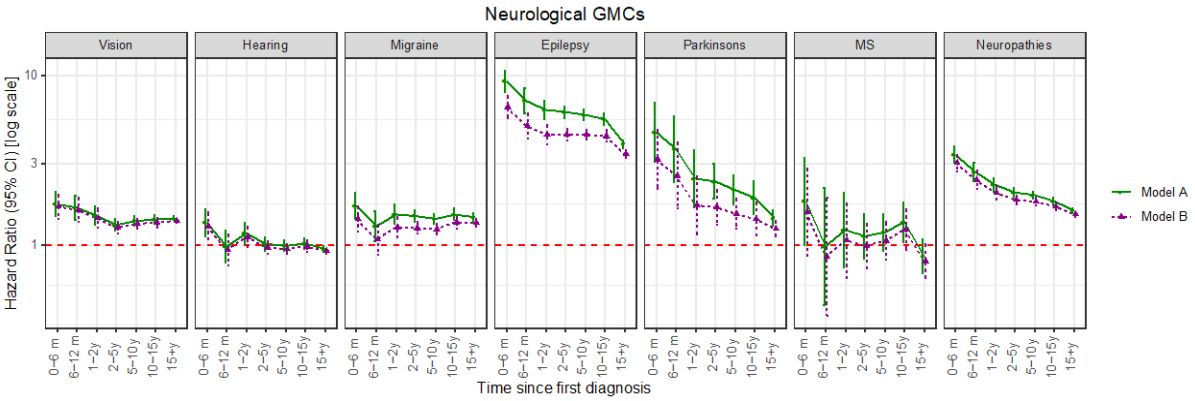


Figure S44.9 - Neurological Conditions



Figures S45.1-S45.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Schizophrenia, depending on time since first diagnosis

Figure S45.1 - Circulatory Conditions

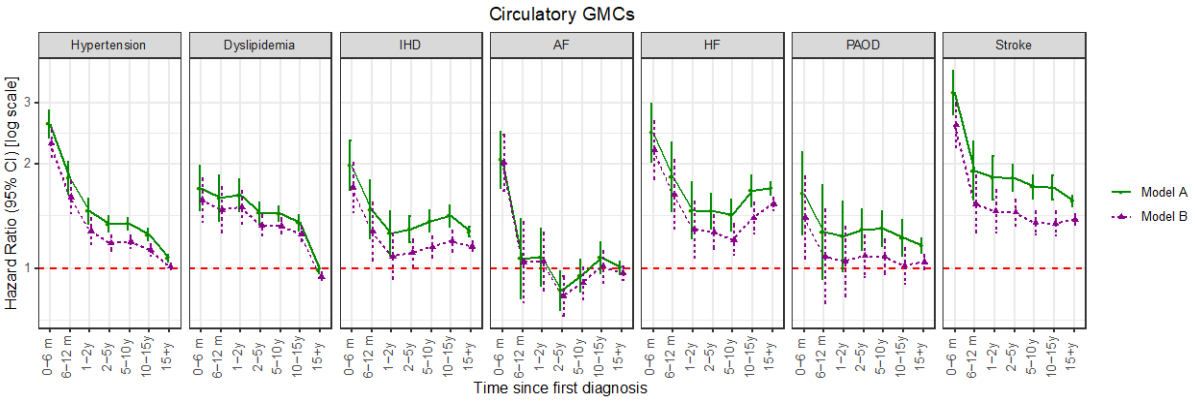


Figure S45.2 - Endocrine Conditions

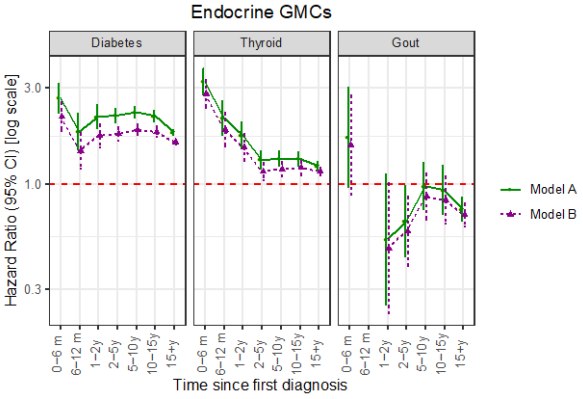


Figure S45.3 - Pulmonary Conditions

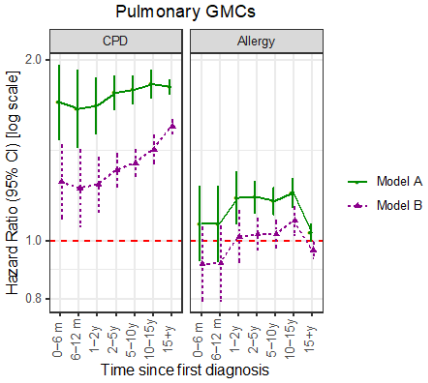


Figure S45.4 - Gastrointestinal Conditions

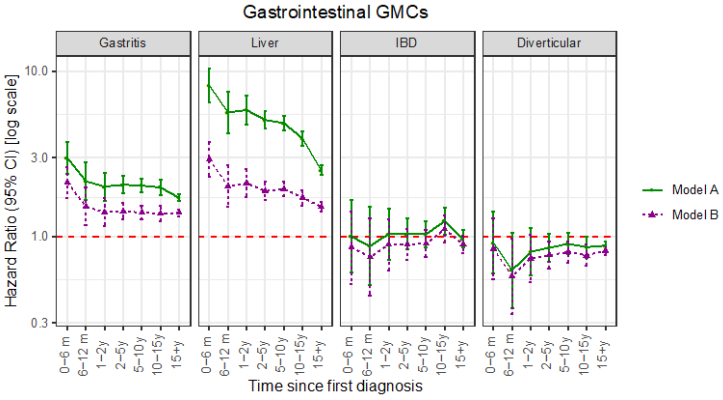


Figure S45.5 - Urogenital Conditions

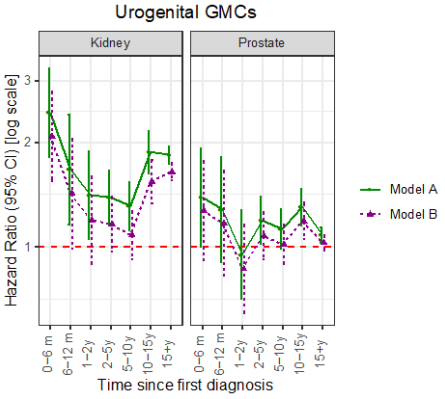


Figure S45.6 - Musculoskeletal Conditions

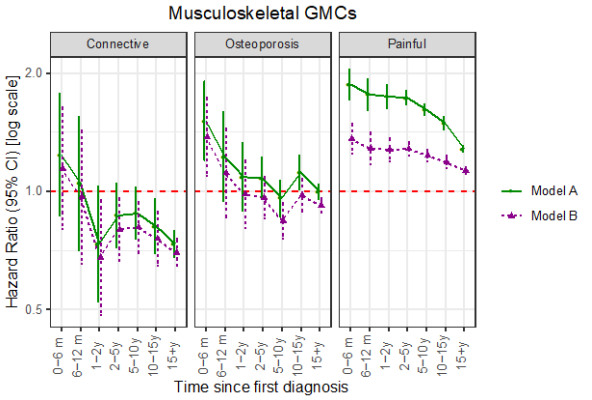


Figure S45.7 - Hematological Conditions

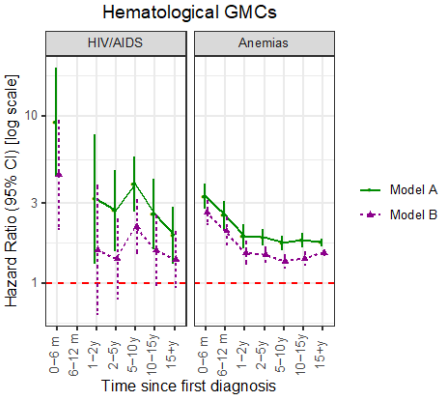


Figure S45.8 - Cancer

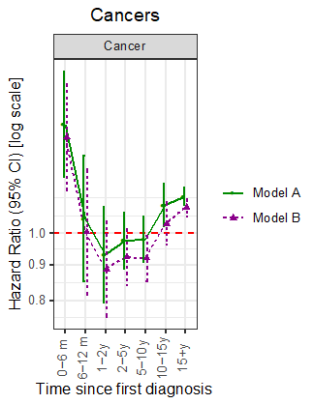
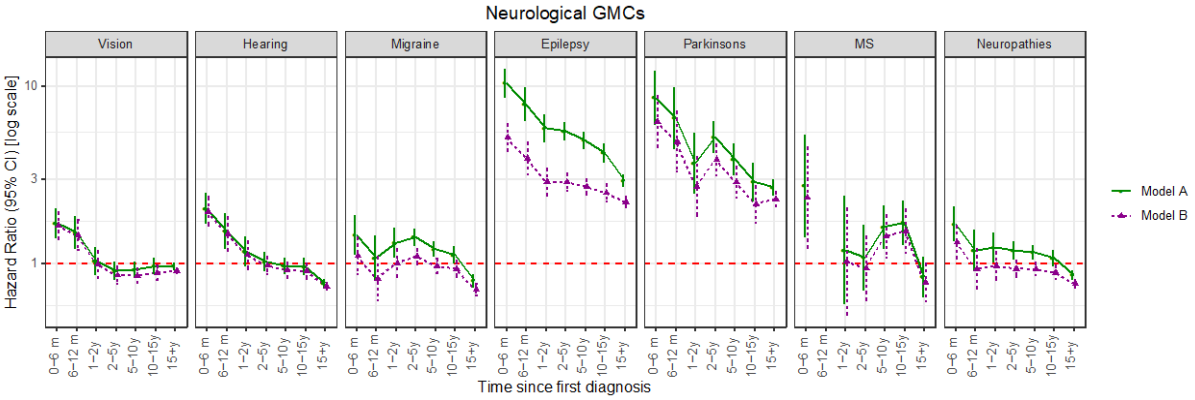


Figure S45.9 - Neurological Conditions



Figures S46.1-S46.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Mood Disorders, depending on time since first diagnosis

Figure S46.1 - Circulatory Conditions

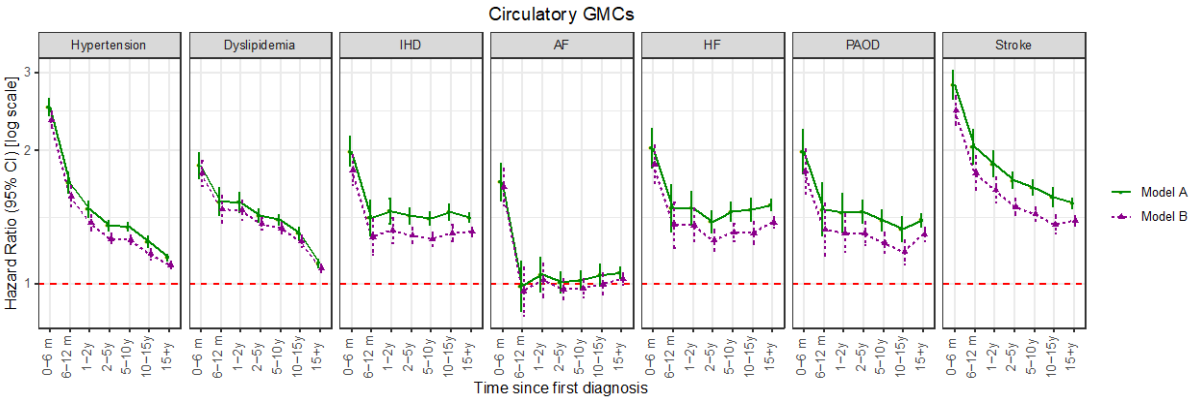


Figure S46.2 - Endocrine Conditions

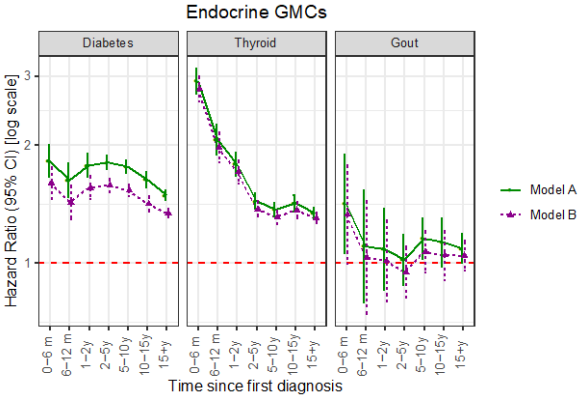


Figure S46.3 - Pulmonary Conditions

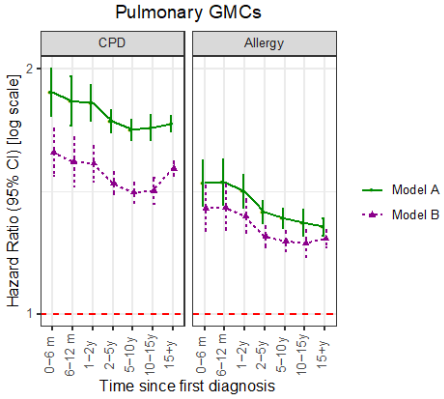


Figure S46.4 - Gastrointestinal Conditions

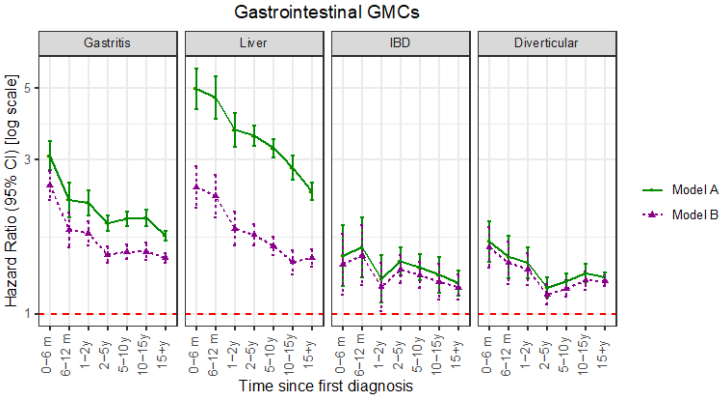


Figure S46.5 - Urogenital Conditions

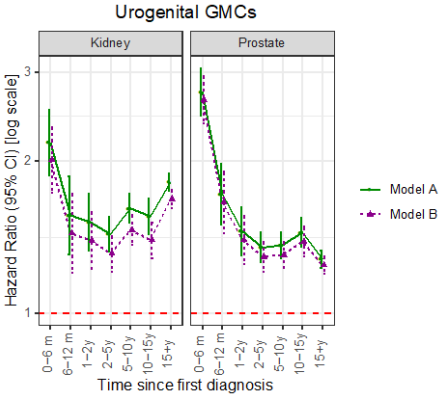


Figure S46.6 - Musculoskeletal Conditions

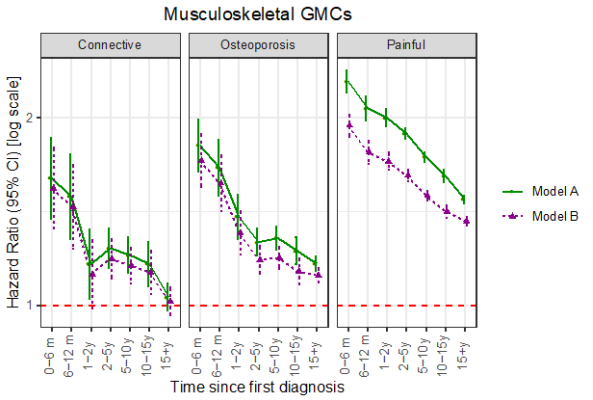


Figure S46.7 - Hematological Conditions

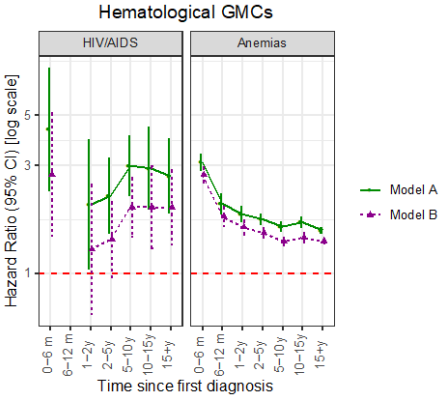


Figure S46.8 - Cancer

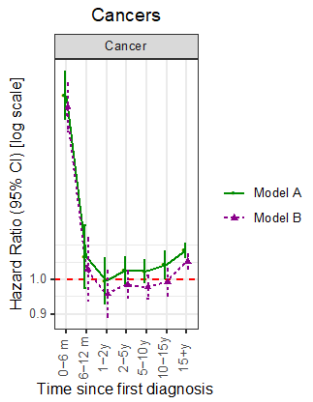
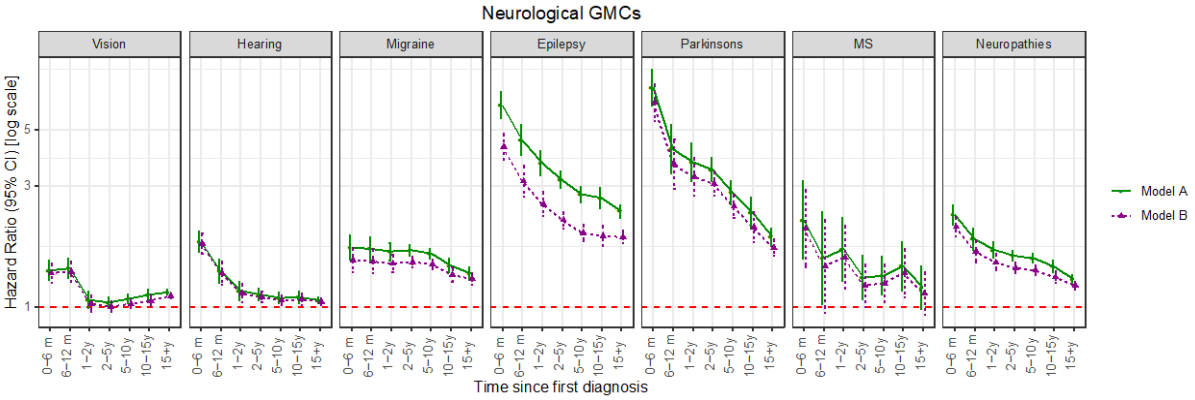


Figure S46.9 - Neurological Conditions



Figures S47.1-S47.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Neurotic Disorders, depending on time since first diagnosis

Figure S47.1 - Circulatory Conditions

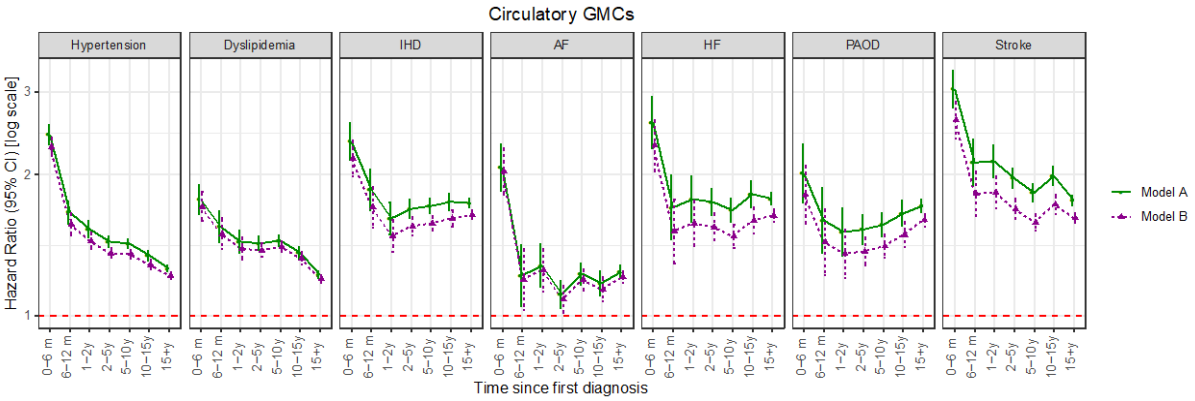


Figure S47.2 - Endocrine Conditions

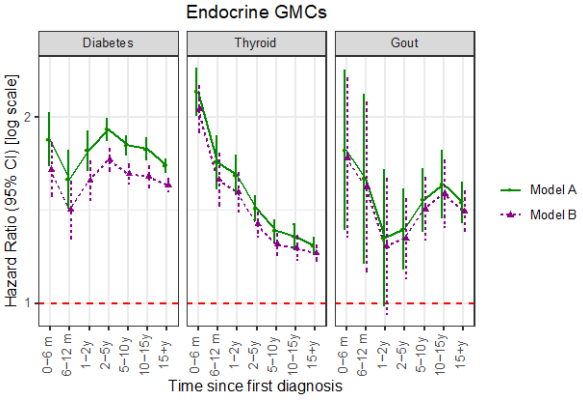


Figure S47.3 - Pulmonary Conditions

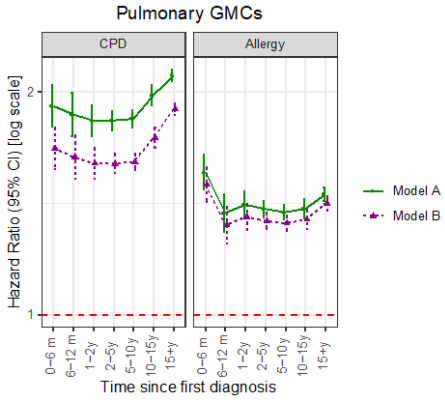


Figure S47.4 - Gastrointestinal Conditions

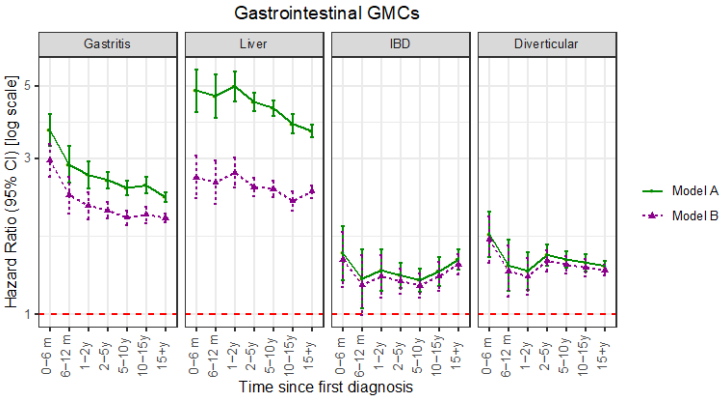


Figure S47.5 - Urogenital Conditions

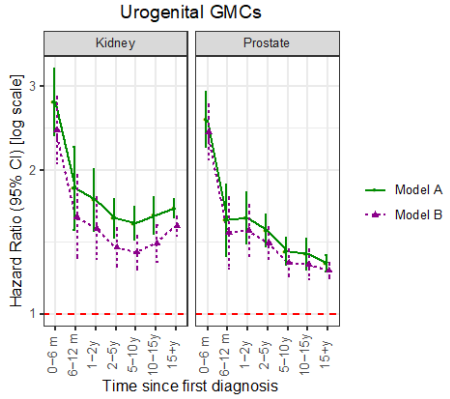


Figure S47.6 - Musculoskeletal Conditions

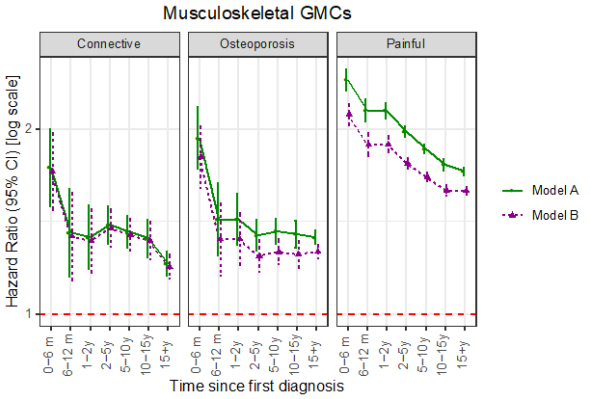


Figure S47.7 - Hematological Conditions

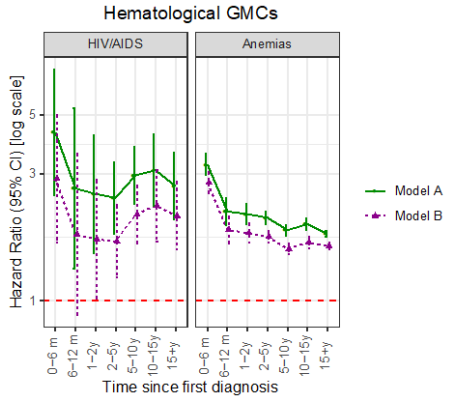


Figure S47.8 - Cancer

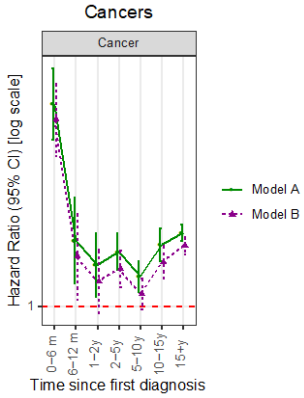
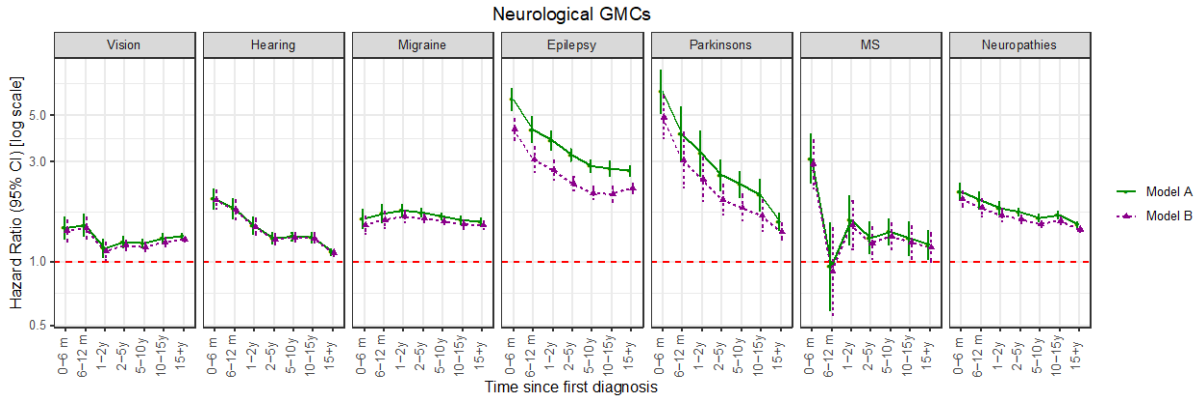


Figure S47.9 - Neurological Conditions



Figures S48.1-S48.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Eating Disorders, depending on time since first diagnosis

Figure S48.1 - Circulatory Conditions

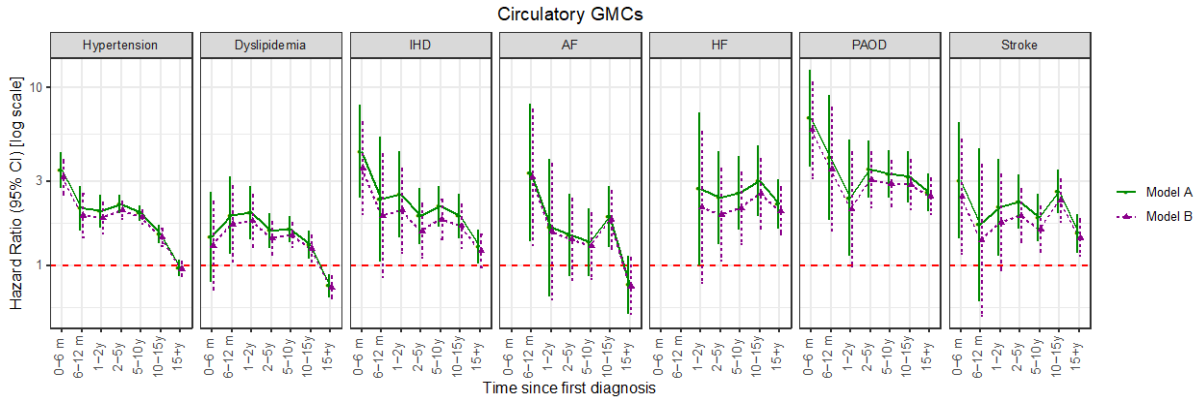


Figure S48.2 - Endocrine Conditions

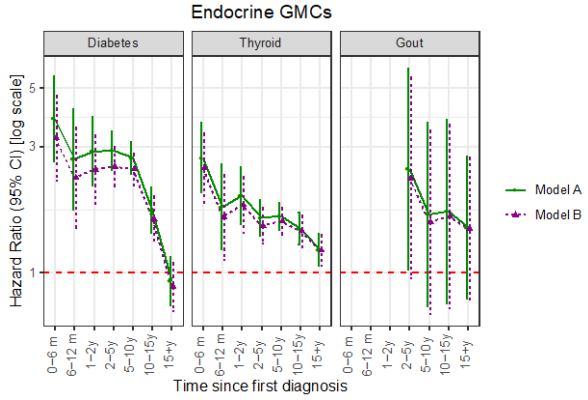


Figure S48.3 - Pulmonary Conditions

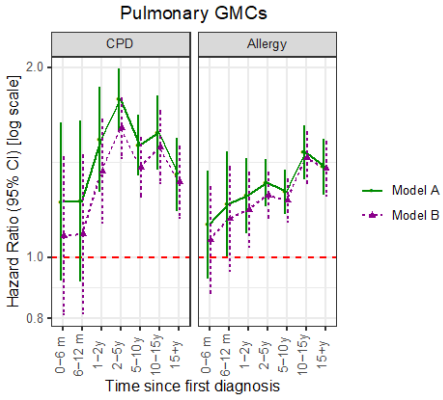


Figure S48.4 - Gastrointestinal Conditions

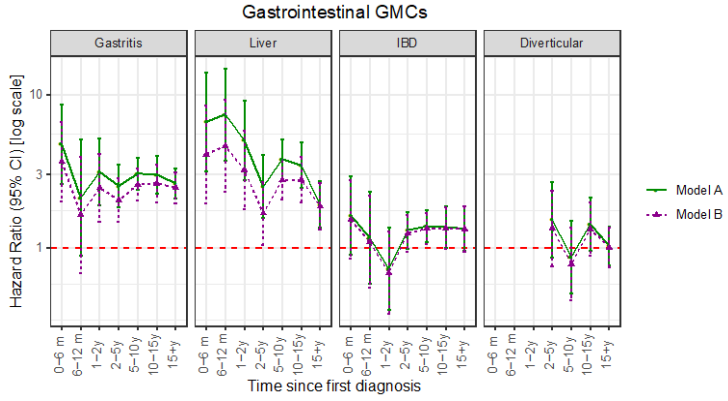


Figure S48.5 - Urogenital Conditions

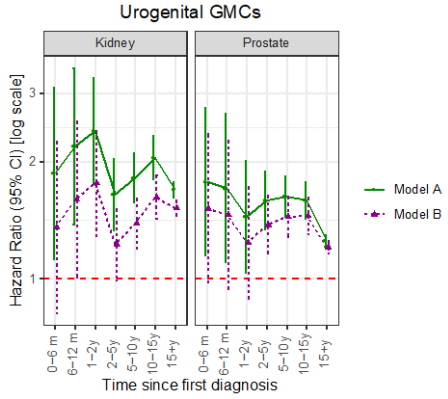


Figure S48.6 - Musculoskeletal Conditions

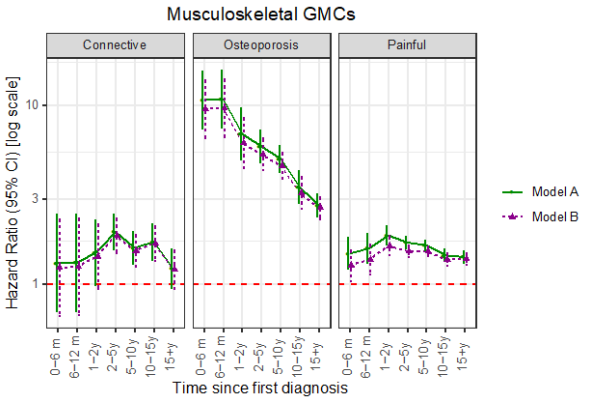


Figure S48.7 - Hematological Conditions

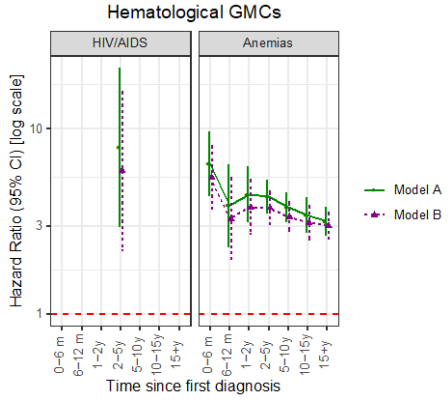


Figure S48.8 – Cancer

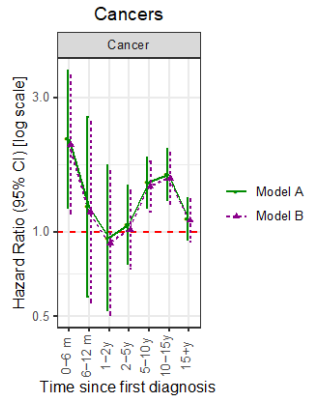
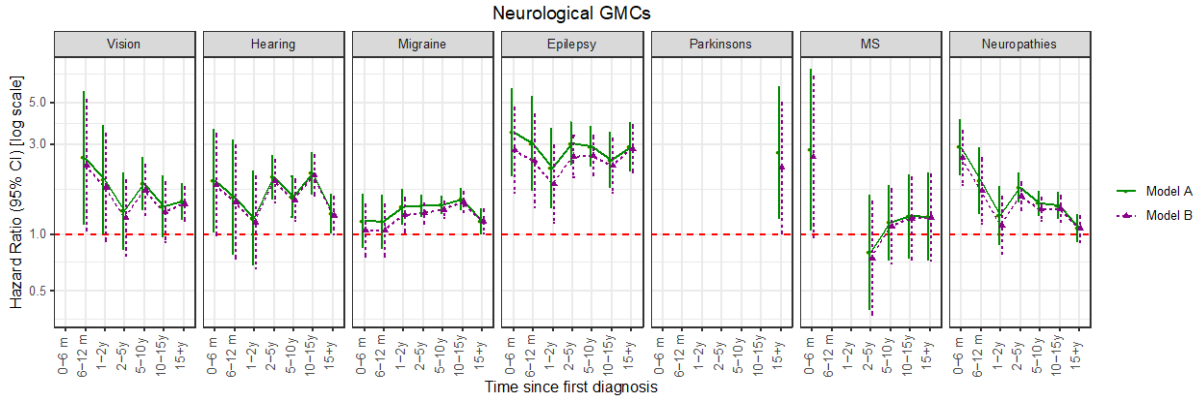


Figure S48.9 - Neurological Conditions



Figures S49.1-S49.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Personality Disorders, depending on time since first diagnosis

Figure S49.1 - Circulatory Conditions

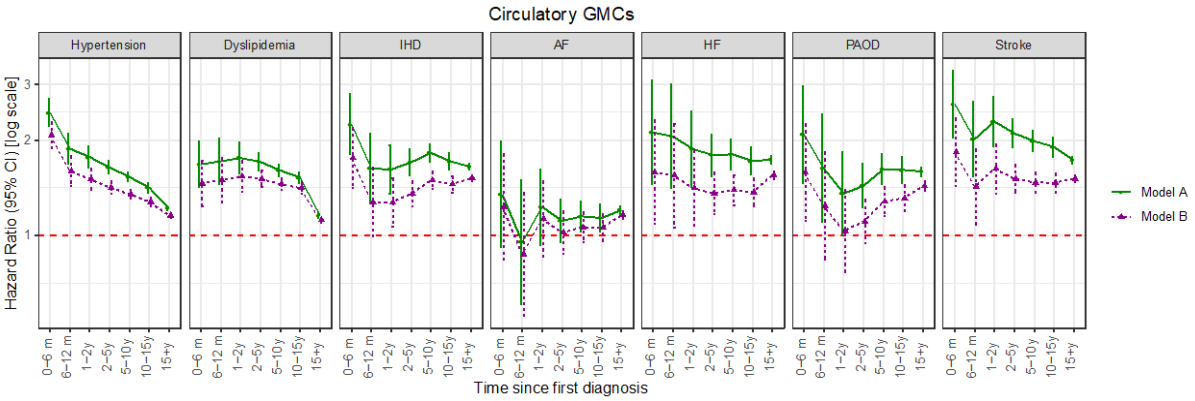


Figure S49.2 - Endocrine Conditions

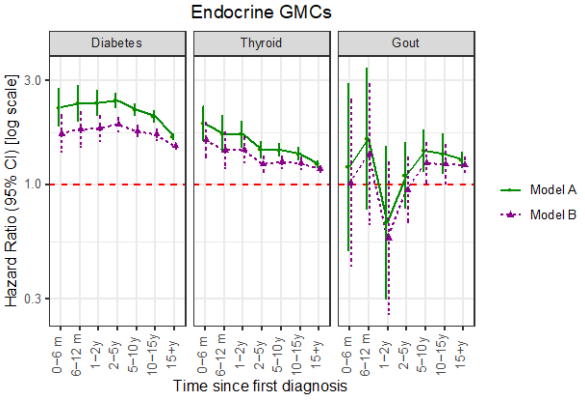


Figure S49.3 - Pulmonary Conditions

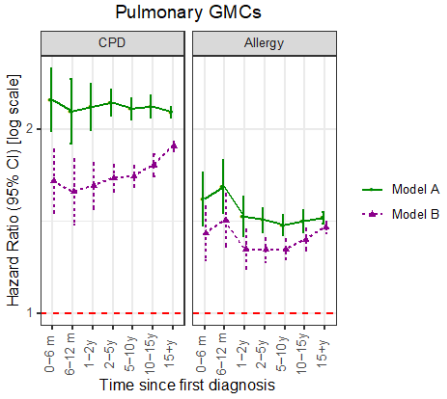


Figure S49.4 - Gastrointestinal Conditions

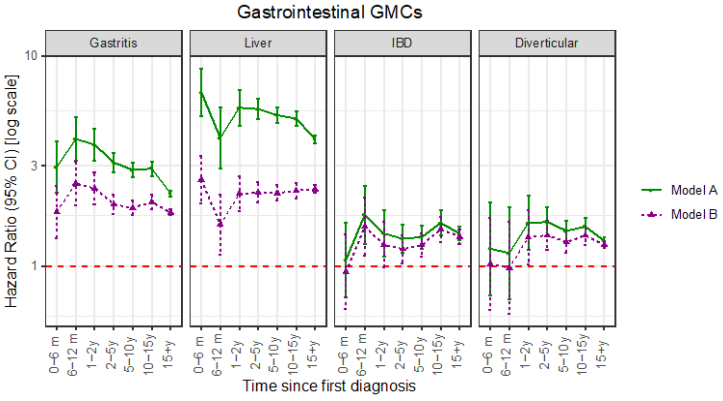


Figure S49.5 - Urogenital Conditions

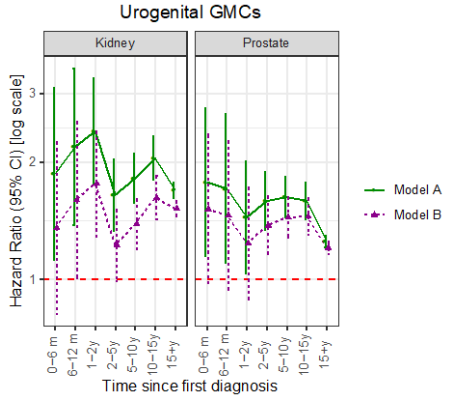


Figure S49.6 - Musculoskeletal Conditions

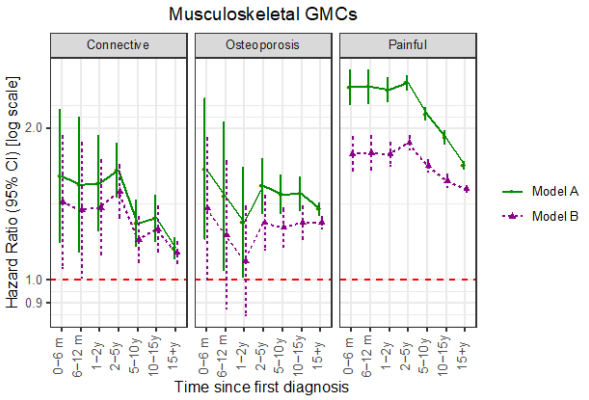


Figure S49.7 - Hematological Conditions

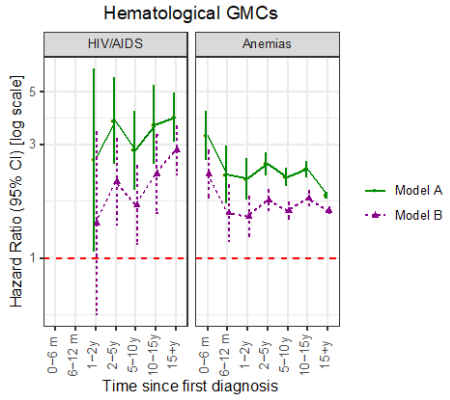


Figure S49.8 – Cancer

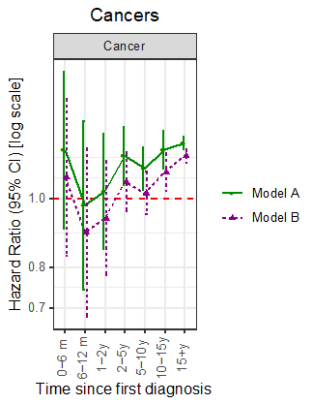
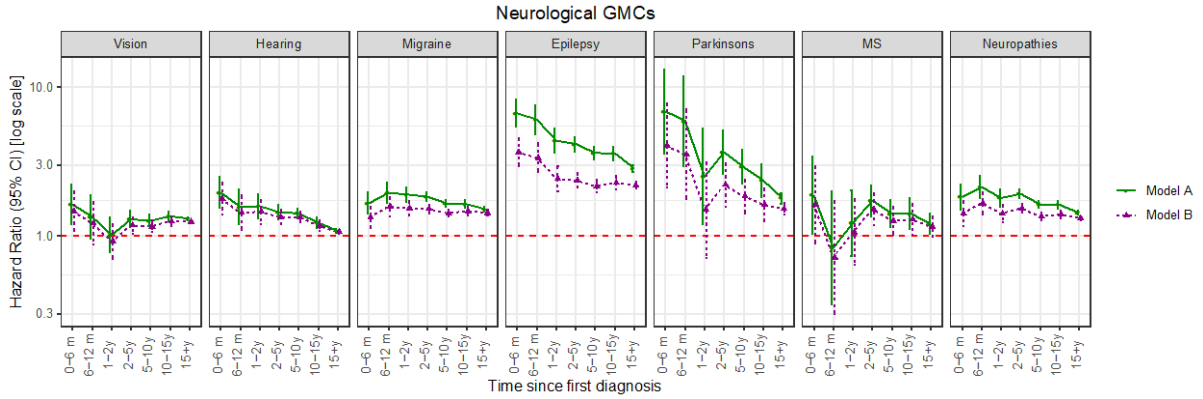


Figure S49.9 - Neurological Conditions



Figures S50.1-S50.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Intellectual Disabilities, depending on time since first diagnosis

Figure S50.1 - Circulatory Conditions

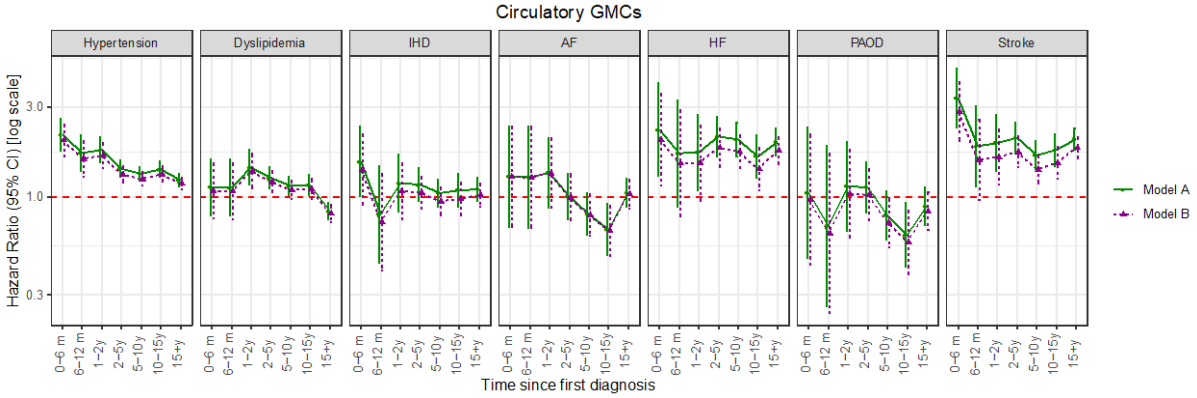


Figure S50.2 - Endocrine Conditions

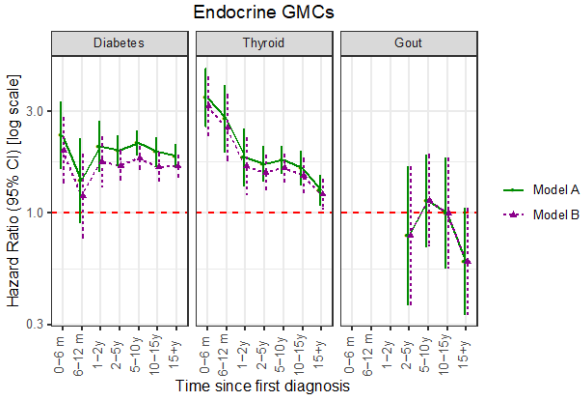


Figure S50.3 - Pulmonary Conditions

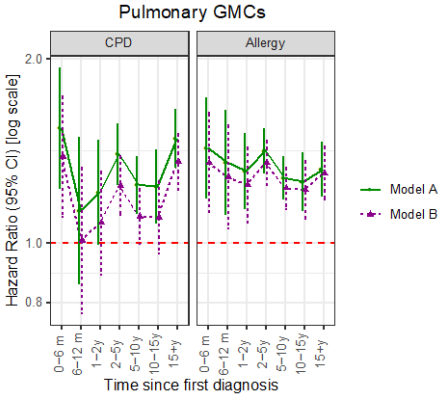


Figure S50.4 - Gastrointestinal Conditions

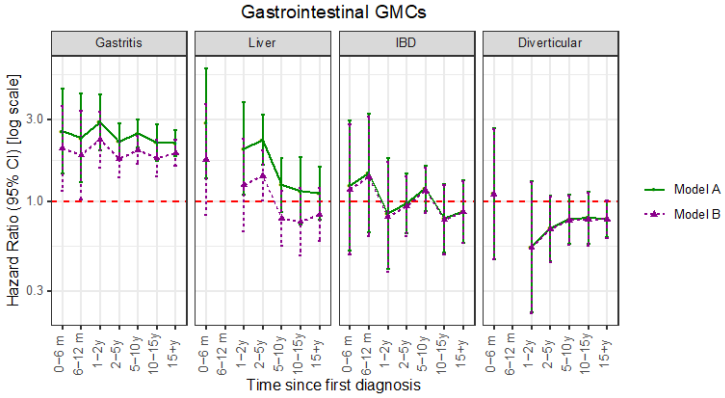


Figure S50.5 - Urogenital Conditions

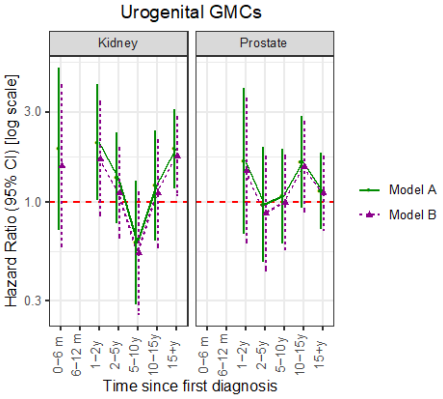


Figure S50.6 - Musculoskeletal Conditions

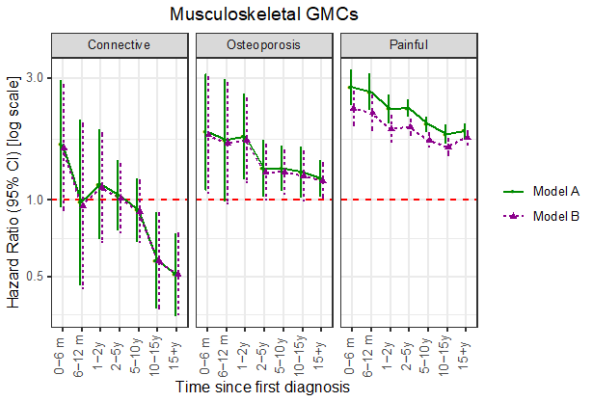


Figure S50.7 - Hematological Conditions

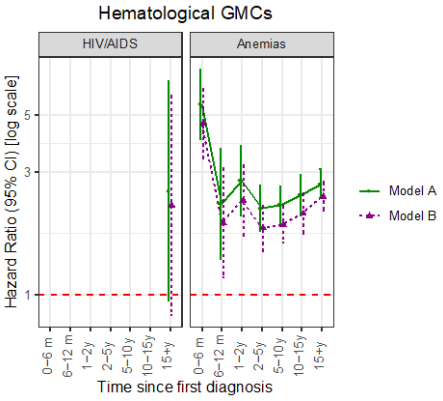


Figure S50.8 – Cancer

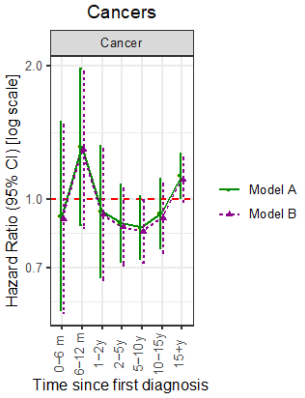
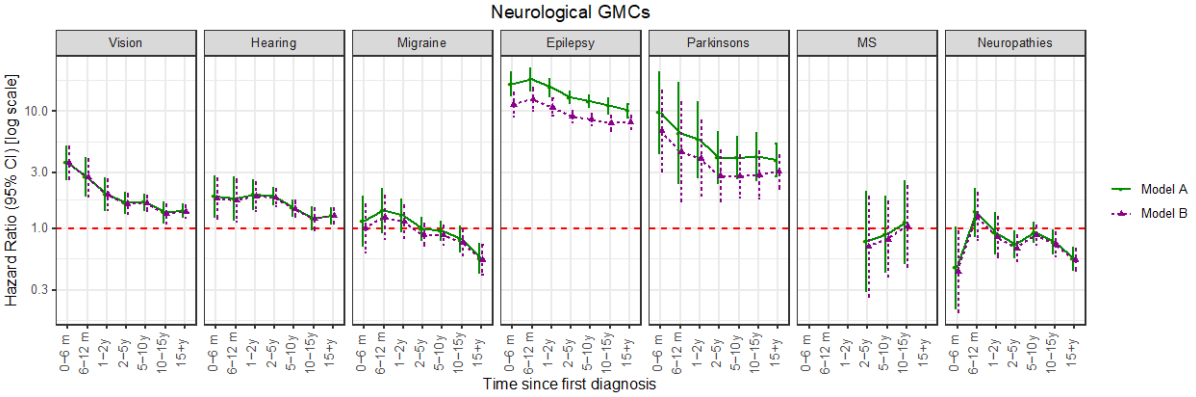


Figure S50.9 - Neurological Conditions



Figures S51.1-S51.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Developmental Disorders, depending on time since first diagnosis

Figure S51.1 - Circulatory Conditions

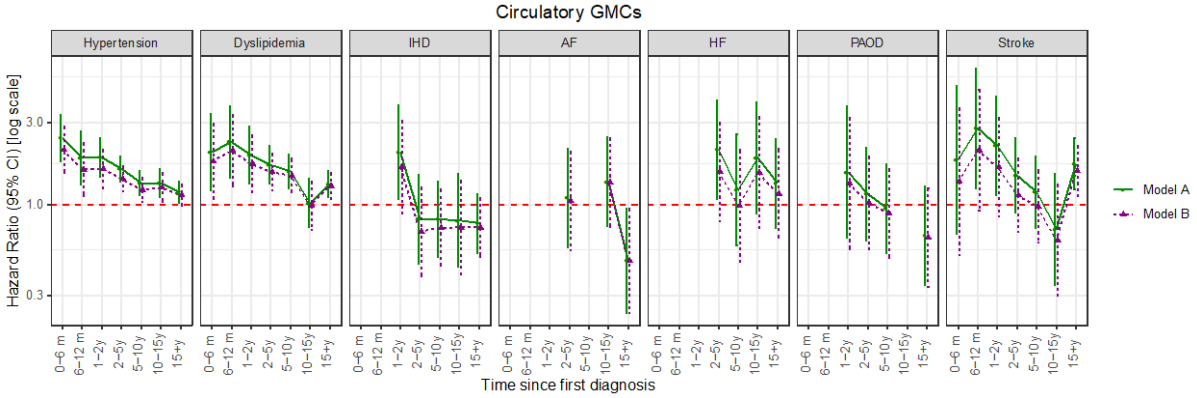


Figure S51.2 - Endocrine Conditions

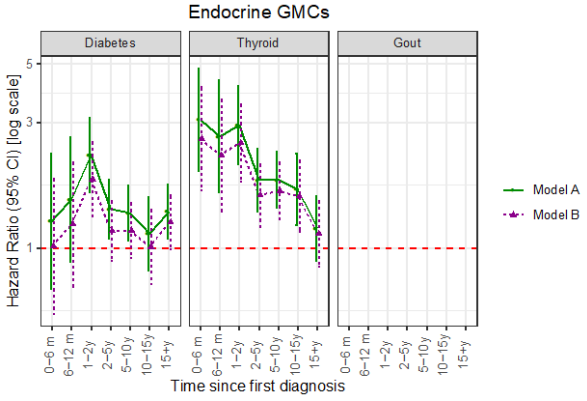


Figure S51.3 - Pulmonary Conditions

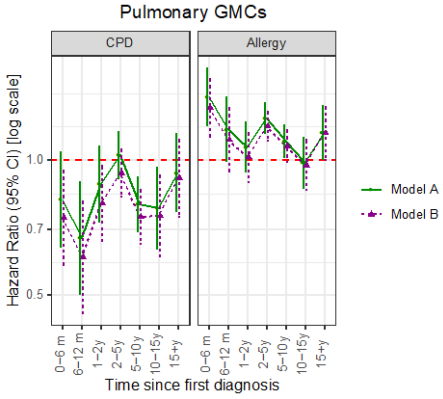


Figure S51.4 - Gastrointestinal Conditions

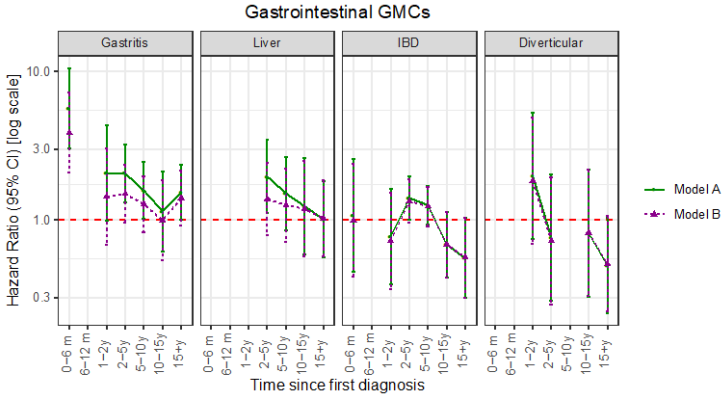


Figure S51.5 - Urogenital Conditions

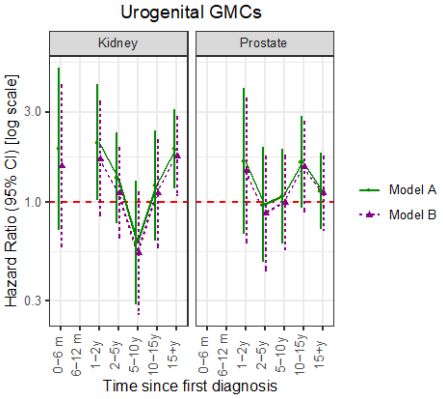


Figure S51.6 - Musculoskeletal Conditions

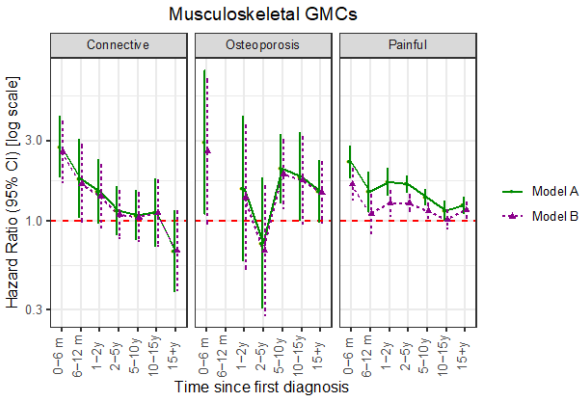


Figure S51.7 - Hematological Conditions

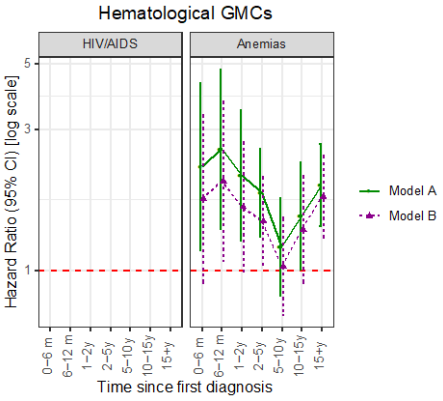


Figure S51.8 – Cancer

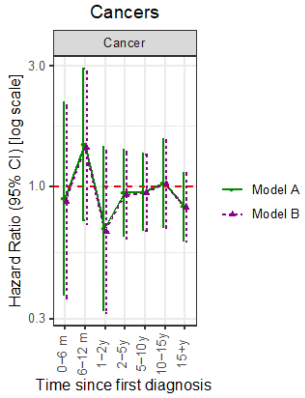
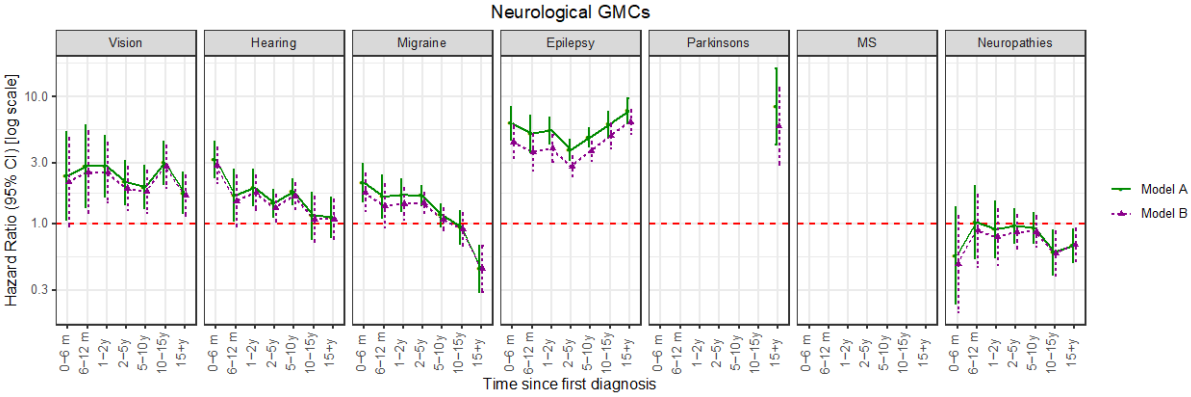


Figure S51.9 - Neurological Conditions



Figures S52.1-S52.9. HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Behavioral Disorders, depending on time since first diagnosis

Figure S52.1 - Circulatory Conditions

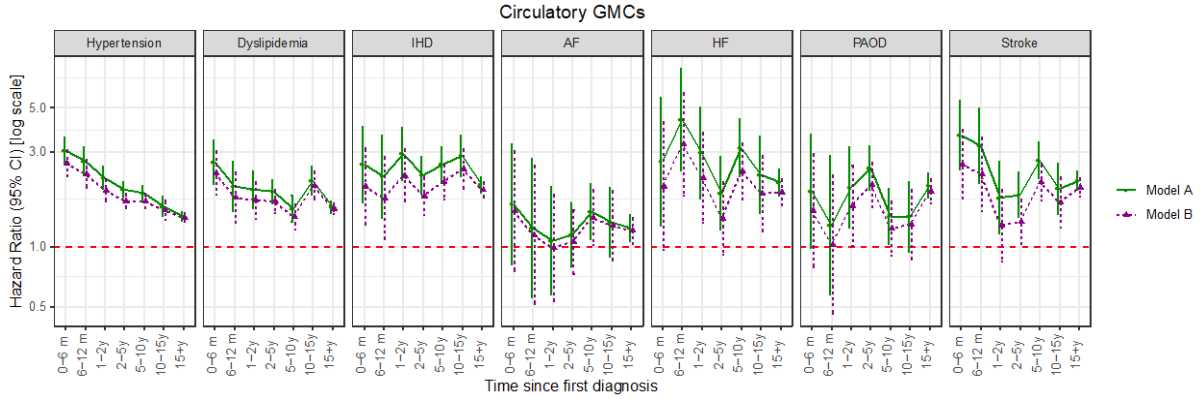


Figure S52.2 - Endocrine Conditions

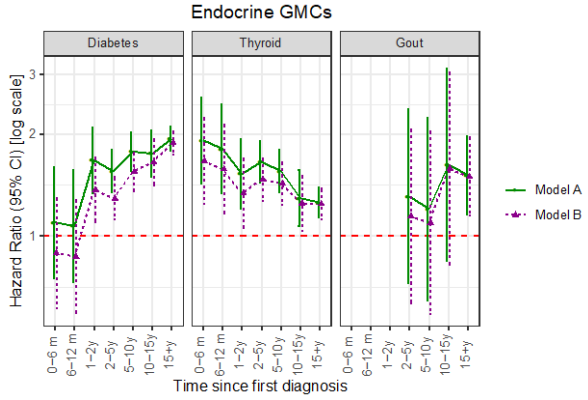


Figure S52.3 - Pulmonary Conditions

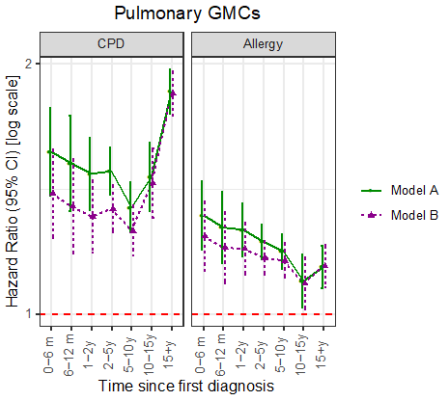


Figure S52.4 - Gastrointestinal Conditions

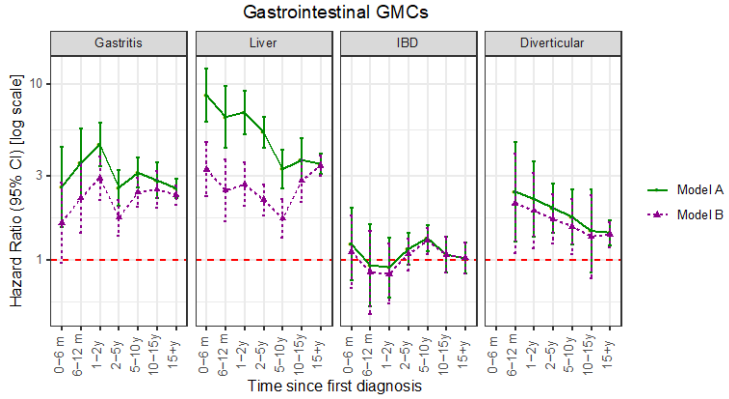


Figure S52.5 - Urogenital Conditions

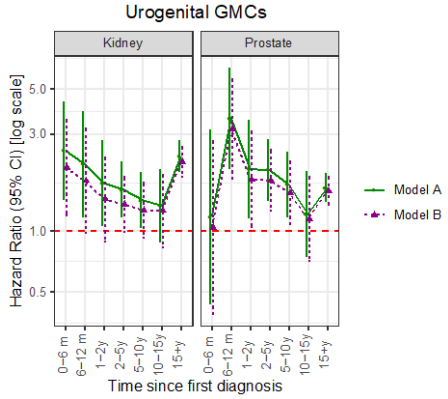


Figure S52.6 - Musculoskeletal Conditions

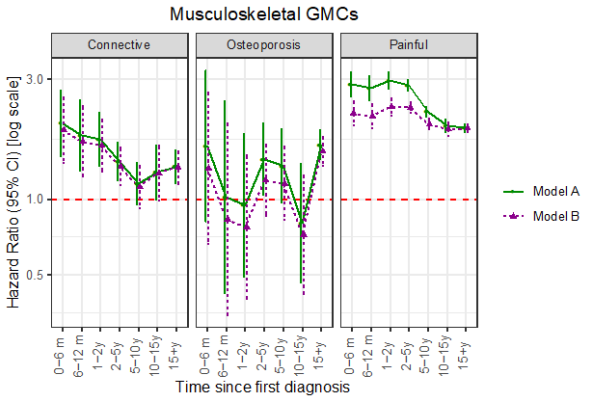


Figure S52.7 - Hematological Conditions

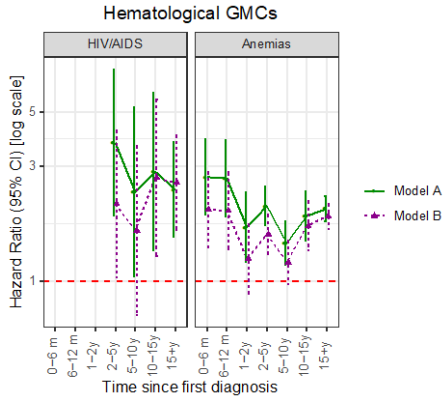


Figure S52.8 – Cancer

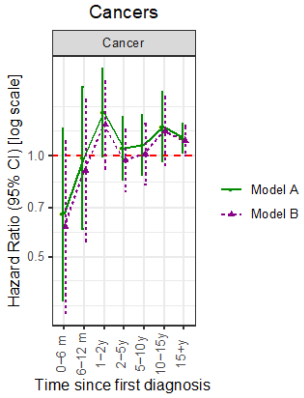
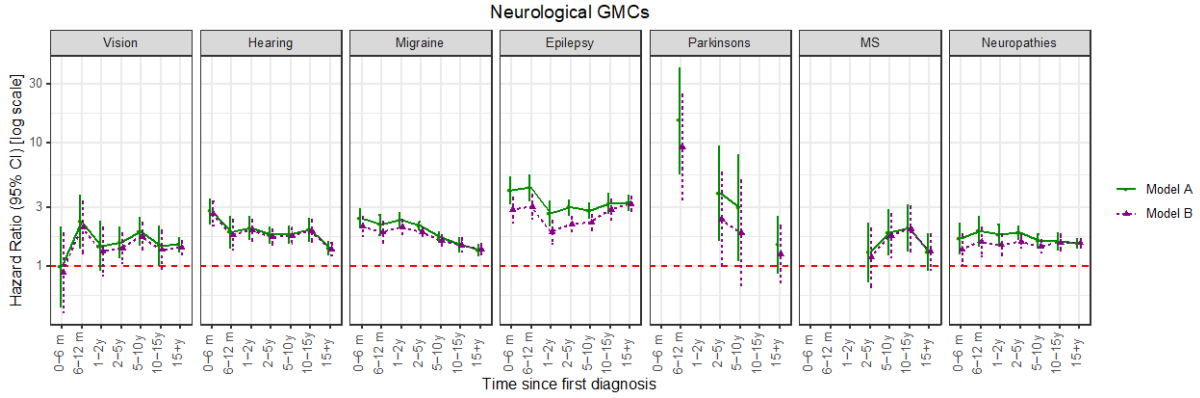


Figure S52.9 - Neurological Conditions



Figures S53.1-S53.9. Sex-specific HRs and 95% CIs for males and females of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Organic Disorders, depending on time since first diagnosis

Figure S53.1 - Circulatory Conditions

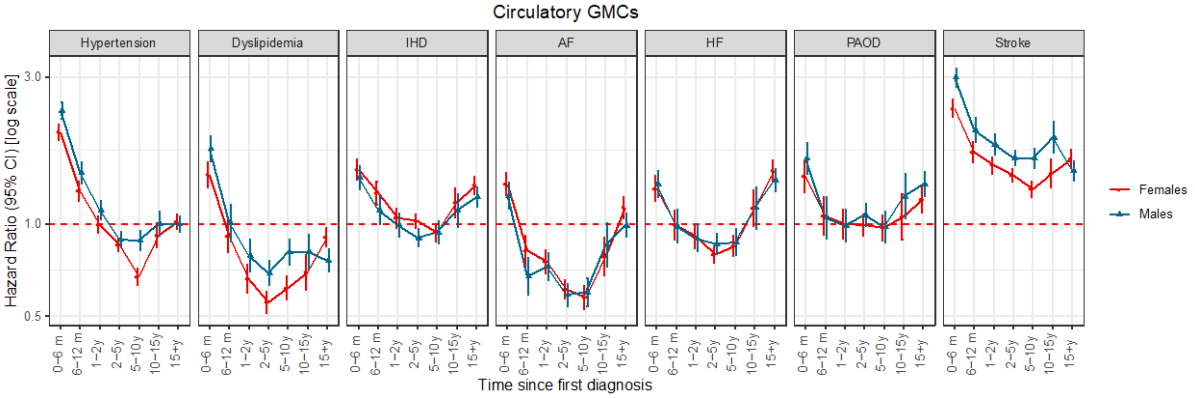


Figure S53.2 - Endocrine Conditions

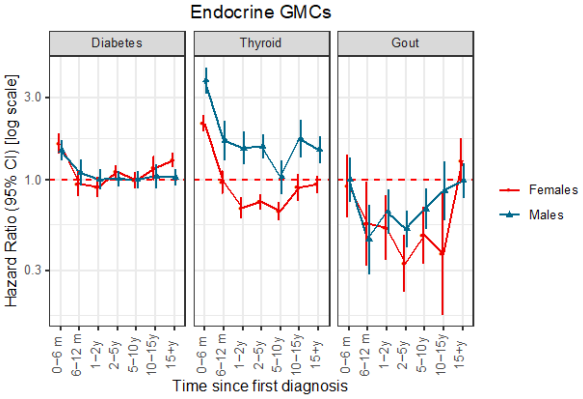


Figure S53.3 - Pulmonary Conditions

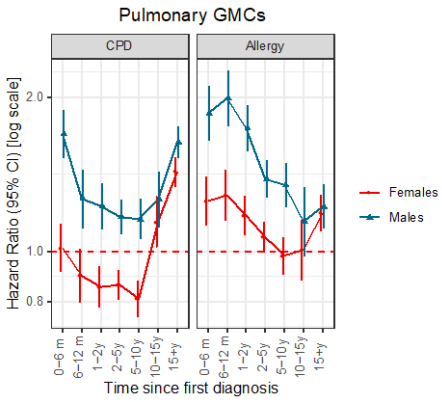


Figure S53.4 - Gastrointestinal Conditions

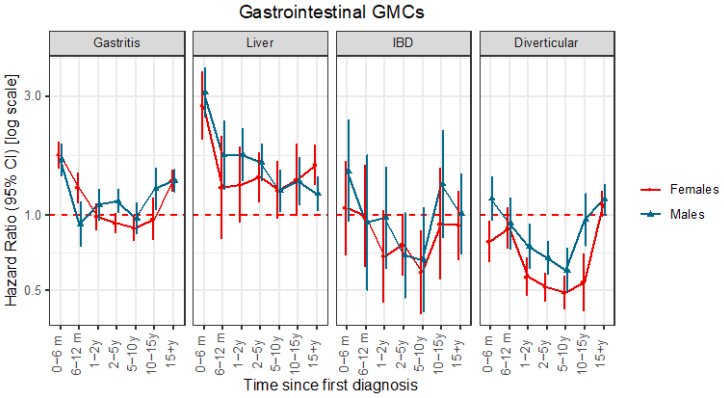


Figure S53.5 - Urogenital Conditions

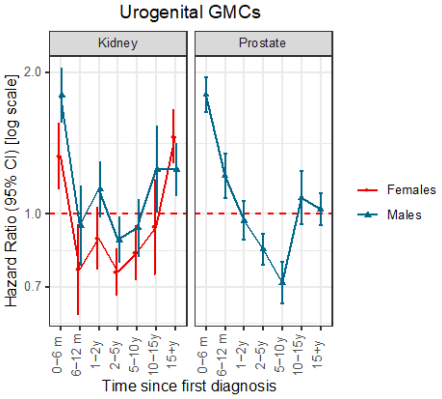


Figure S53.6 - Musculoskeletal Conditions

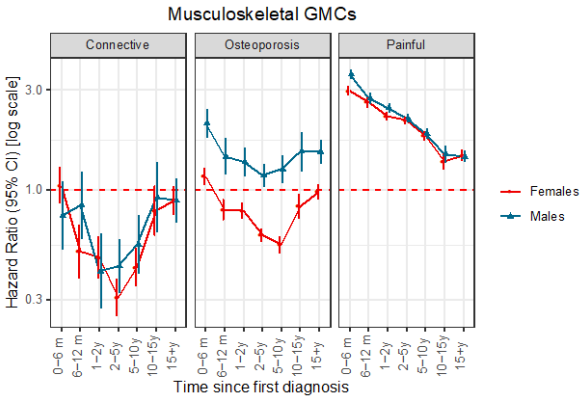


Figure S53.7 - Hematological Conditions

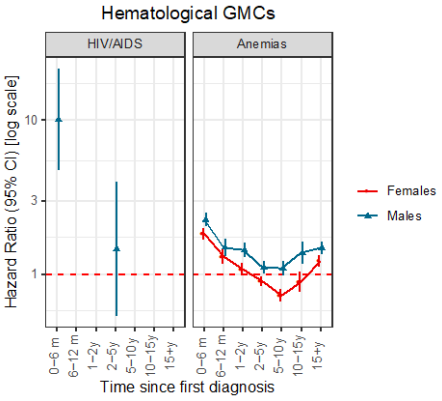


Figure S53.8 – Cancer

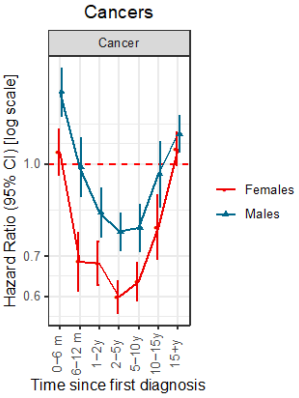
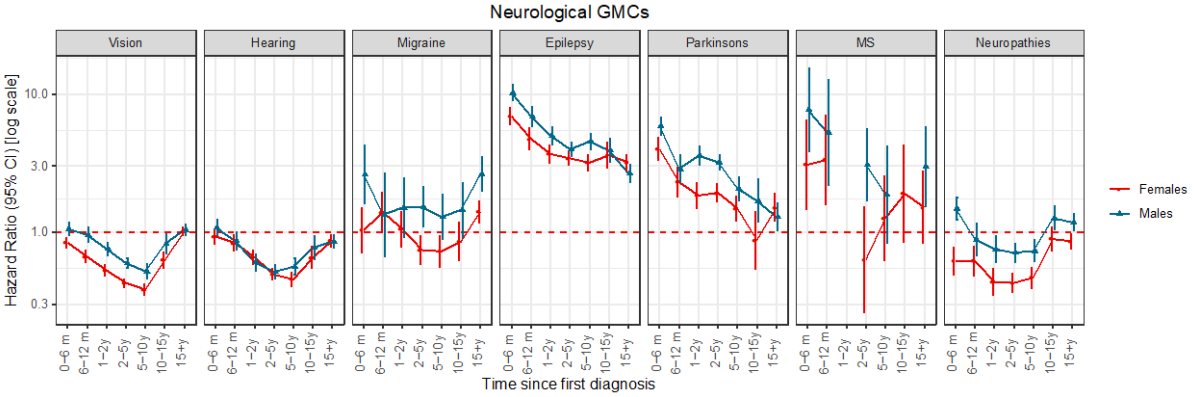


Figure S53.9 - Neurological Conditions



Figures S54.1-S54.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Substance Use Disorders, depending on time since first diagnosis

Figure S54.1 - Circulatory Conditions

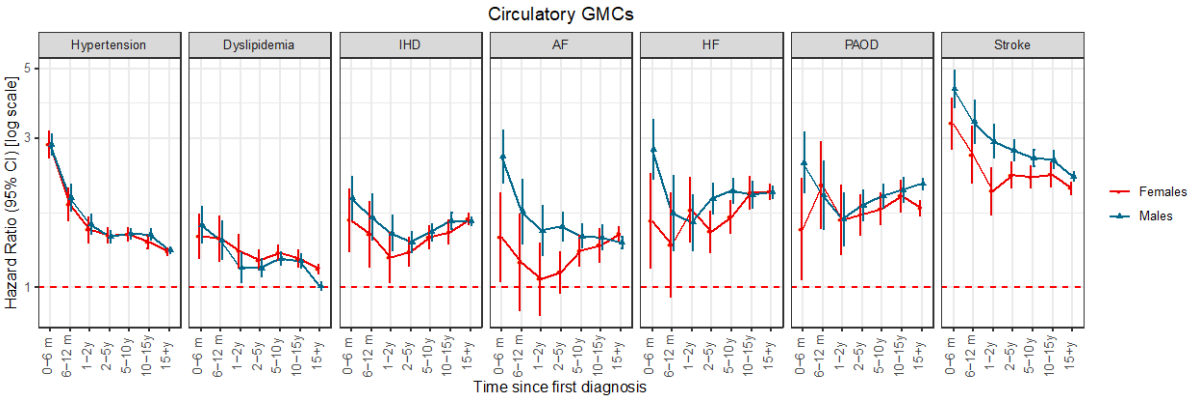


Figure S54.2 - Endocrine Conditions

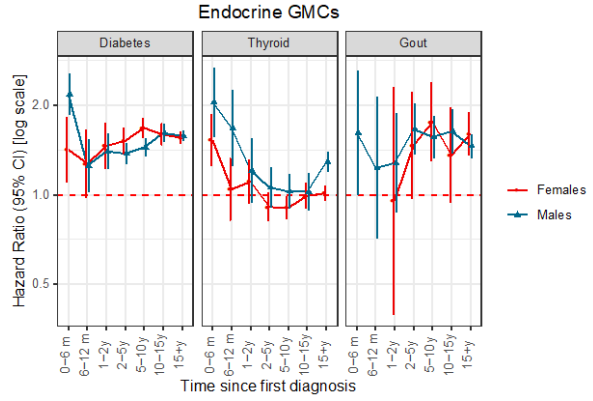


Figure S54.3 - Pulmonary Conditions

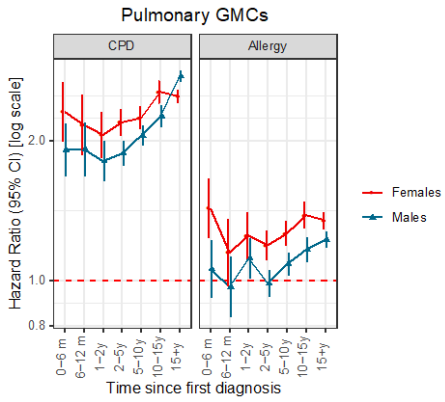


Figure S54.4 - Gastrointestinal Conditions

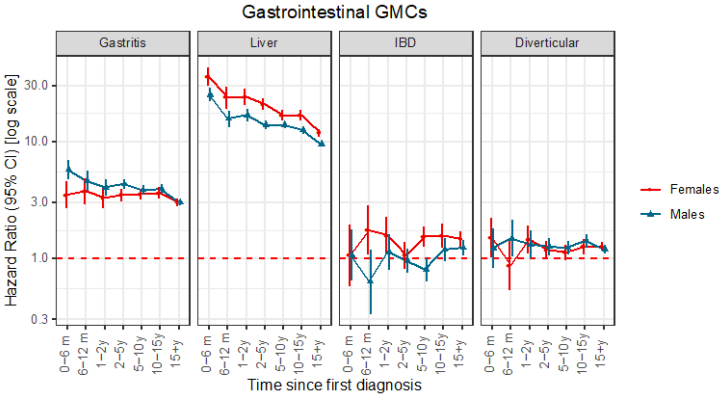


Figure S54.5 - Urogenital Conditions

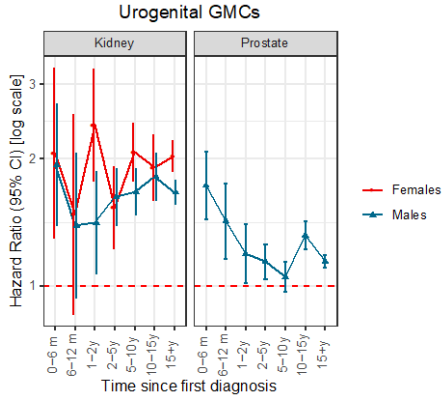


Figure S54.6 - Musculoskeletal Conditions

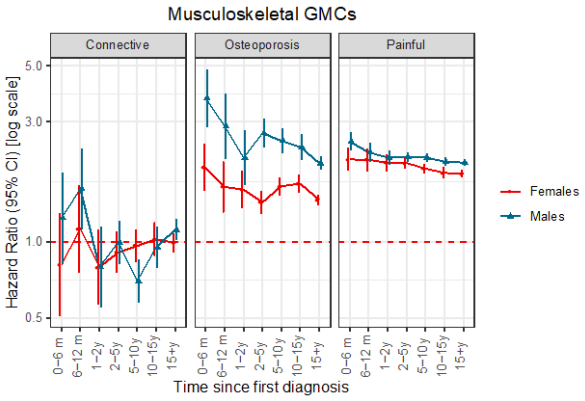


Figure S54.7 - Hematological Conditions

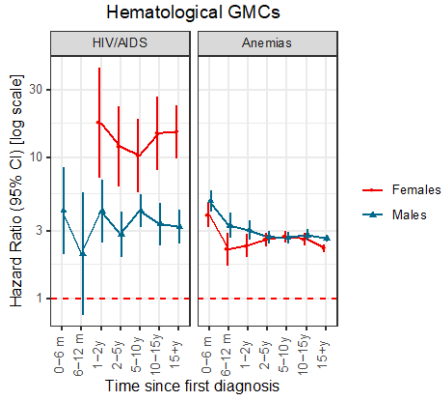


Figure S54.8 – Cancer

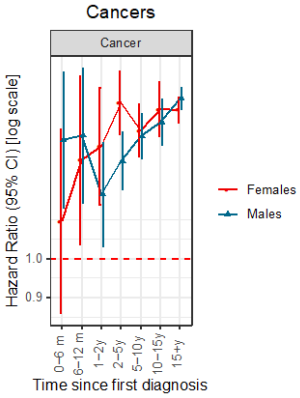
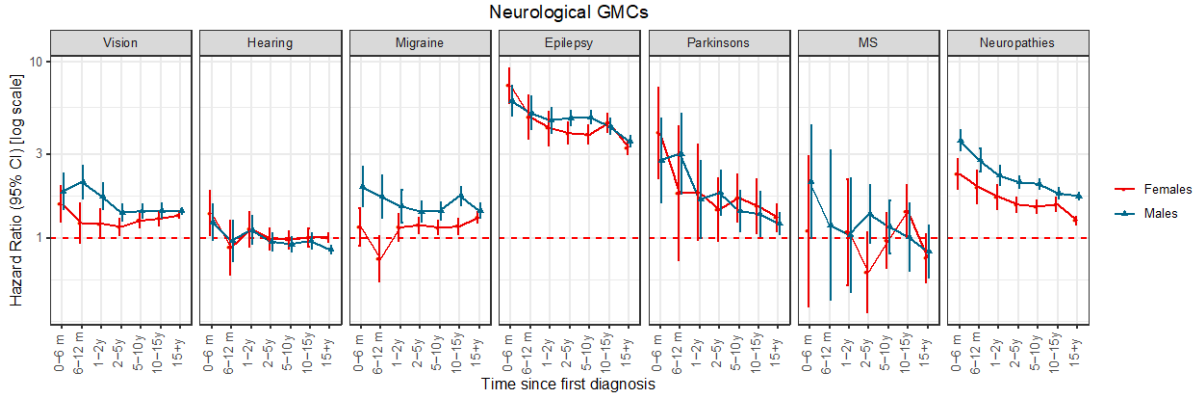


Figure S54.9 - Neurological Conditions



Figures S55.1-S55.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Schizophrenia, depending on time since first diagnosis

Figure S55.1 - Circulatory Conditions

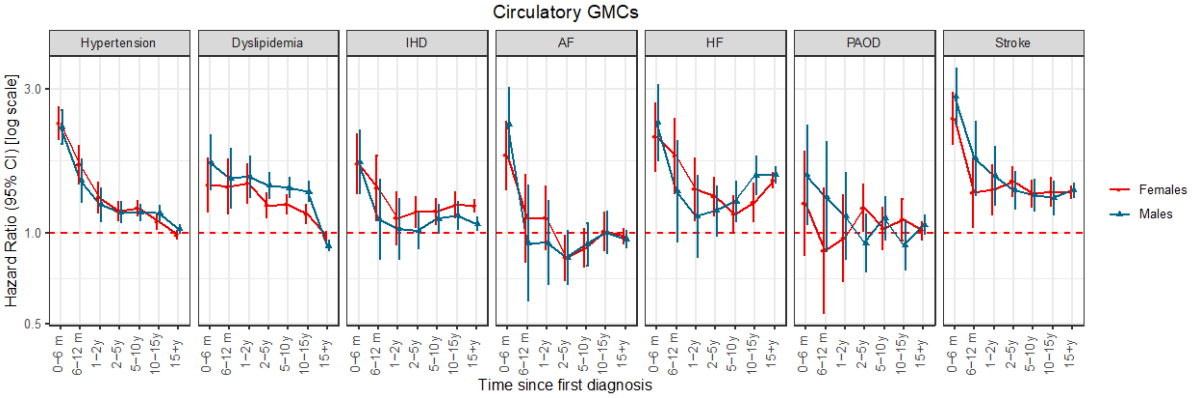


Figure S55.2 - Endocrine Conditions

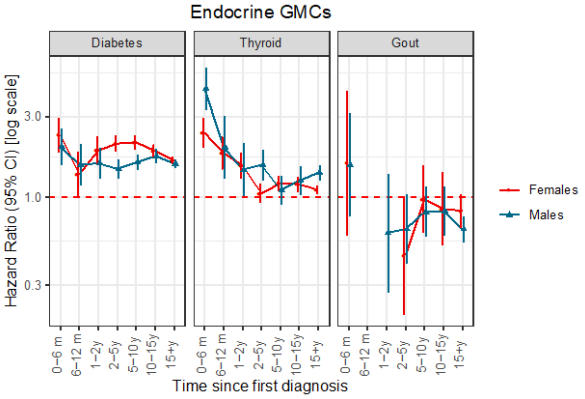


Figure S55.3 - Pulmonary Conditions

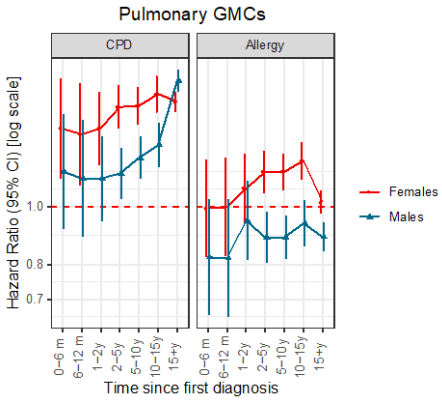


Figure S55.4 - Gastrointestinal Conditions

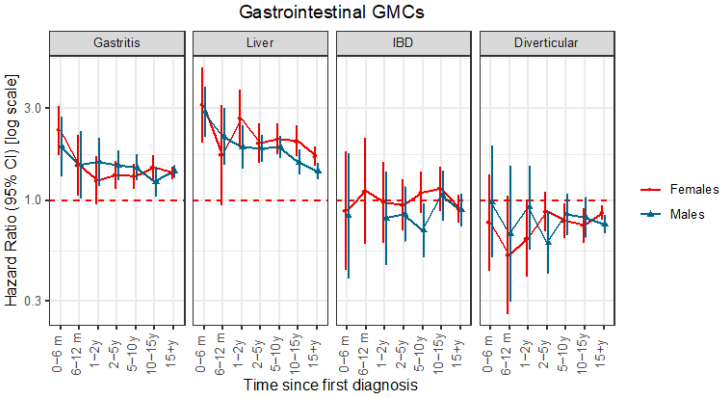


Figure S55.5 - Urogenital Conditions

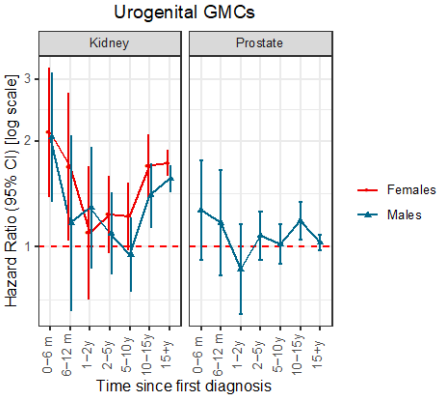


Figure S55.6 - Musculoskeletal Conditions

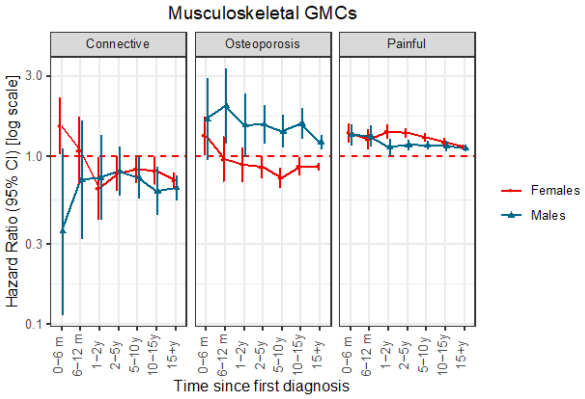


Figure S55.7 - Hematological Conditions

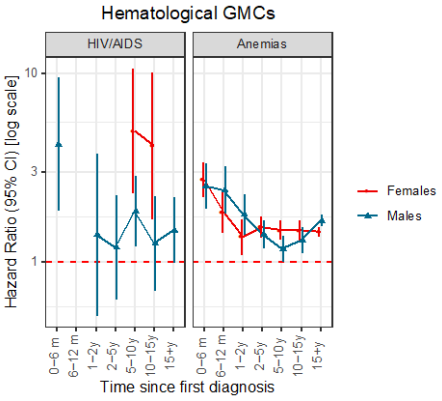


Figure S55.8 – Cancer

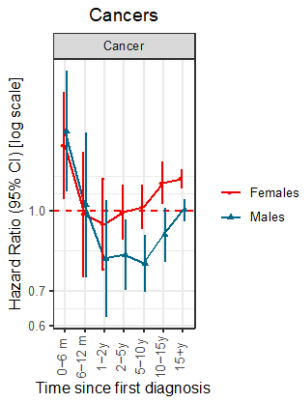
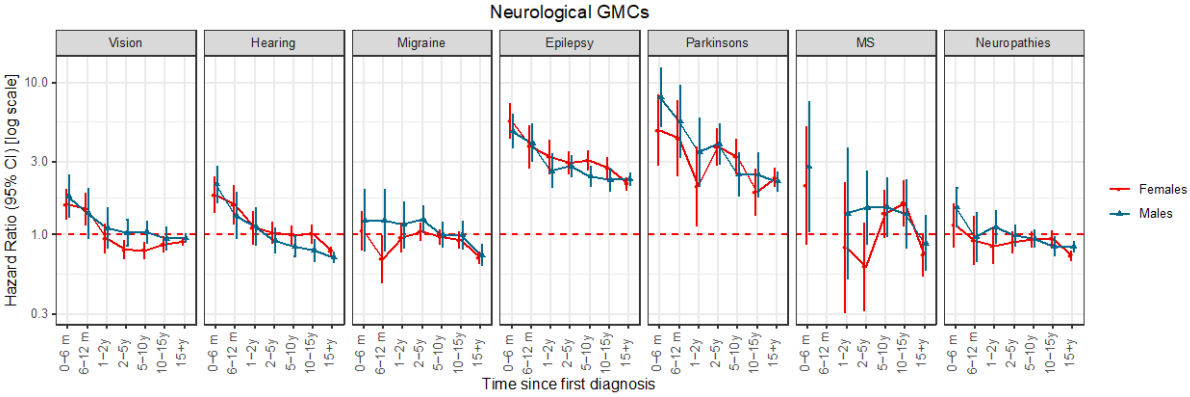


Figure S55.9 - Neurological Conditions



Figures S56.1-56.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Mood Disorders, depending on time since first diagnosis

Figure S56.1 - Circulatory Conditions

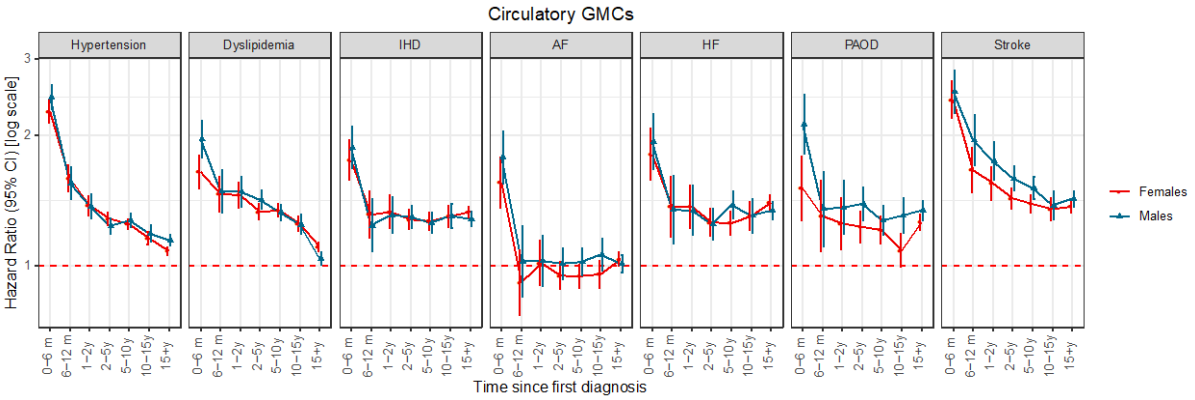


Figure S56.2 - Endocrine Conditions

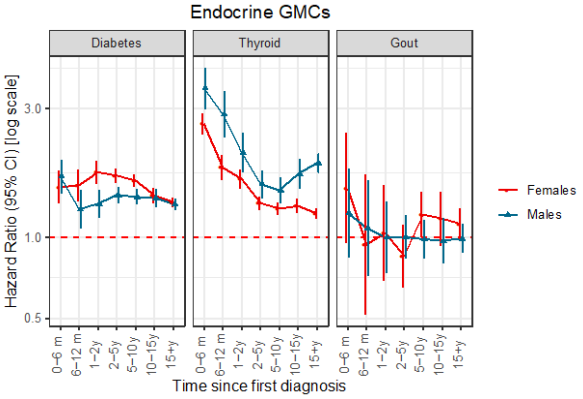


Figure S56.3 - Pulmonary Conditions

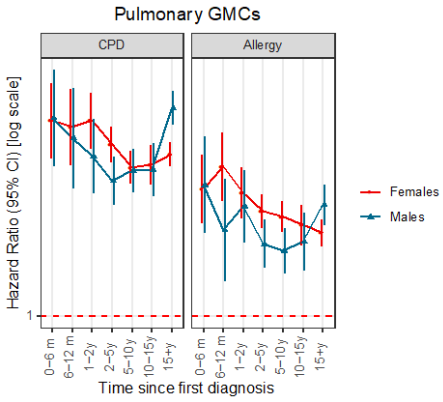


Figure S56.4 - Gastrointestinal Conditions

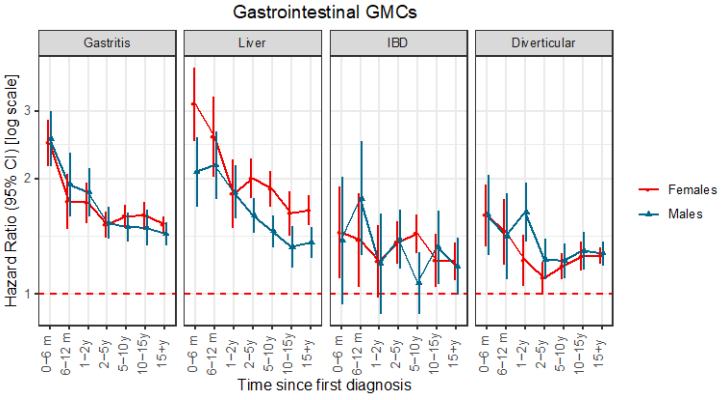


Figure S56.5 - Urogenital Conditions

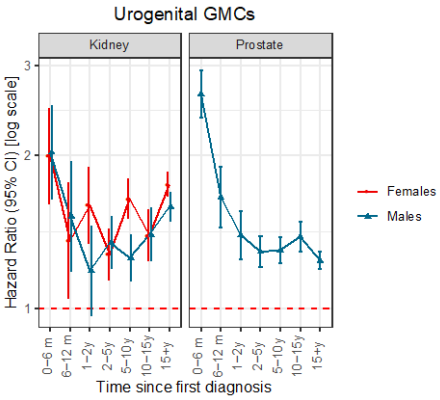


Figure S56.6 - Musculoskeletal Conditions

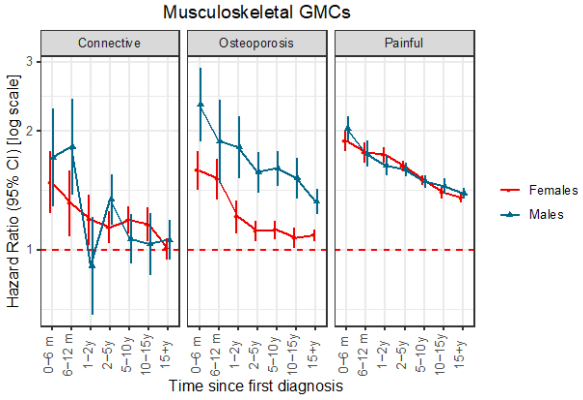


Figure S56.7 - Hematological Conditions

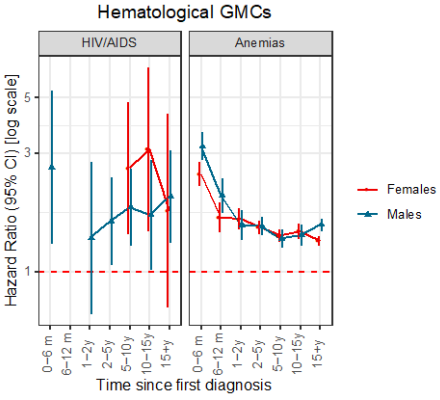


Figure S56.8 – Cancer

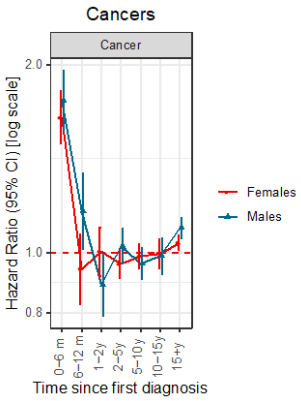
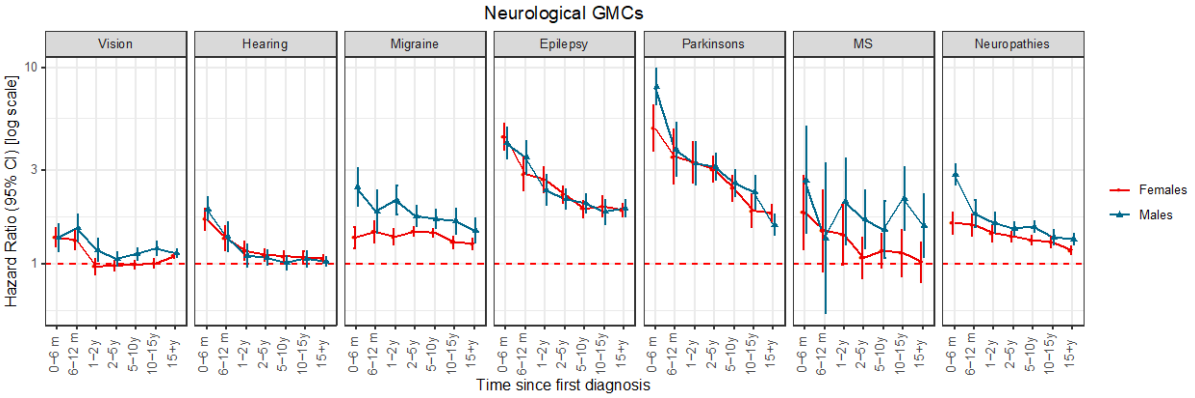


Figure S56.9 - Neurological Conditions



Figures S57.1-S57.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Neurotic Disorders, depending on time since first diagnosis

Figure S57.1 - Circulatory Conditions

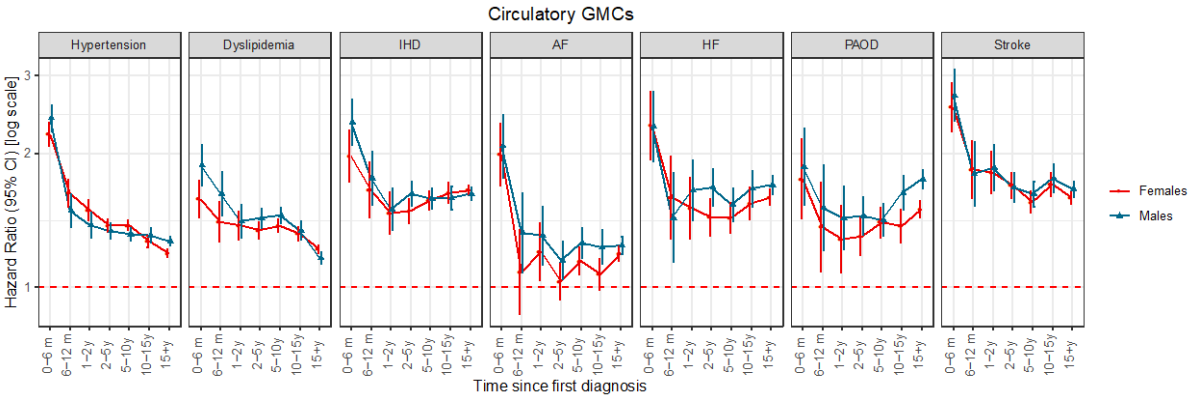


Figure S57.2 - Endocrine Conditions

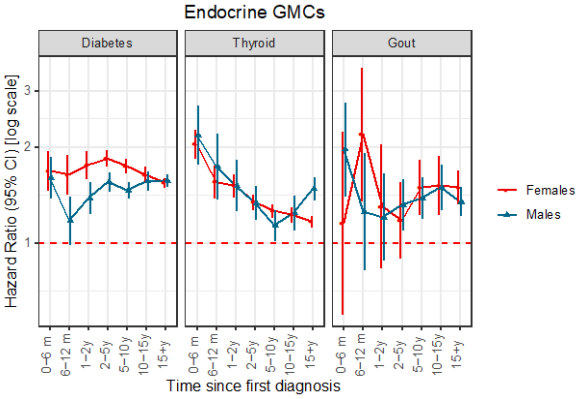


Figure S57.3 - Pulmonary Conditions

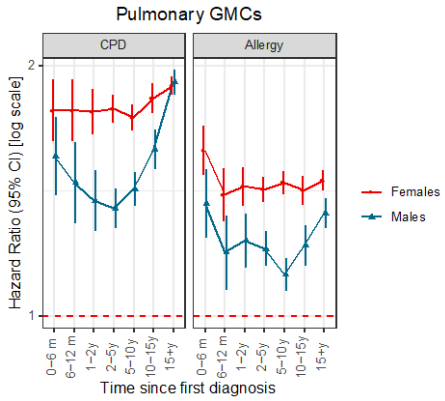


Figure S57.4 - Gastrointestinal Conditions

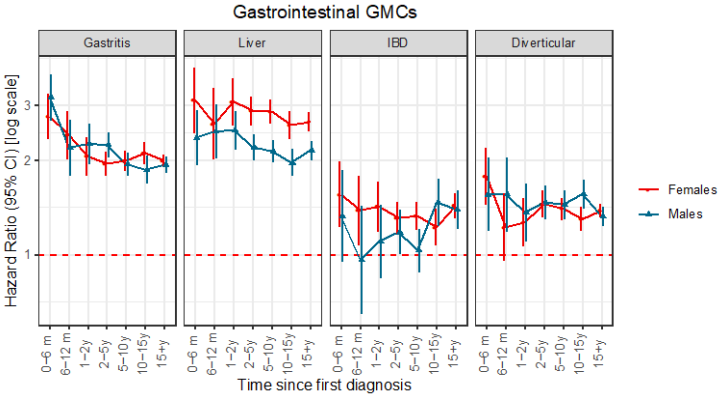


Figure S57.5 - Urogenital Conditions

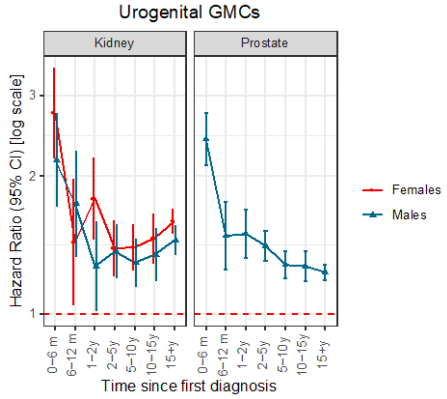


Figure S57.6 - Musculoskeletal Conditions

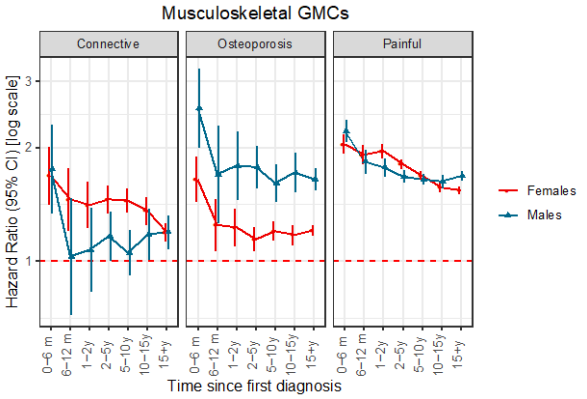


Figure S57.7 - Hematological Conditions

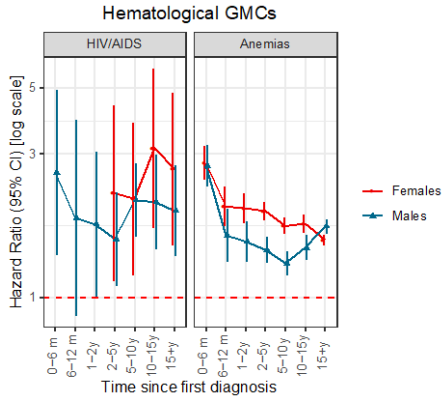


Figure S57.8 – Cancer

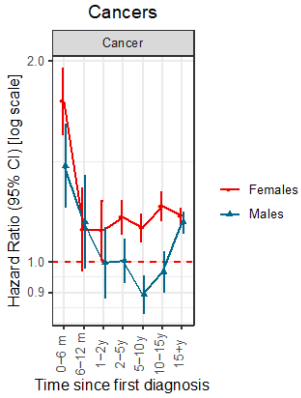
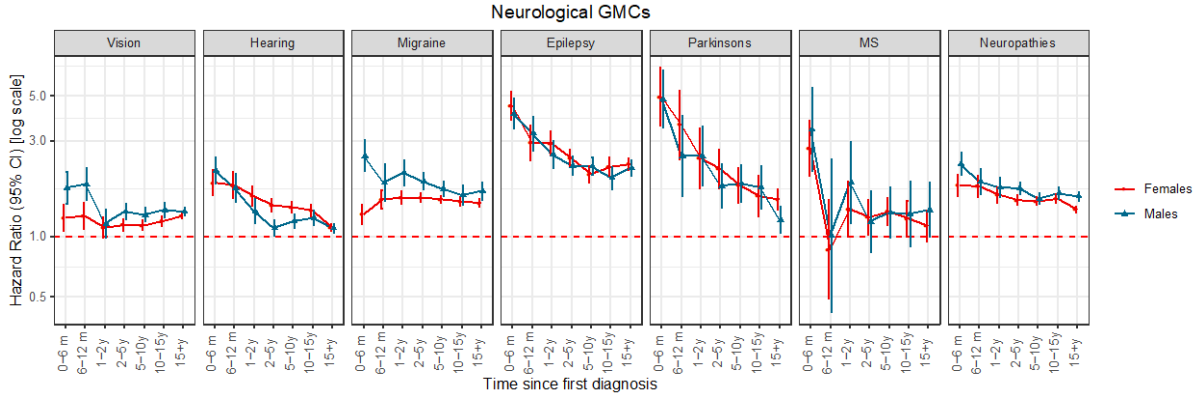


Figure S57.9 - Neurological Conditions



Figures S58.1-S58.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Eating Disorders, depending on time since first diagnosis

Figure S58.1 - Circulatory Conditions

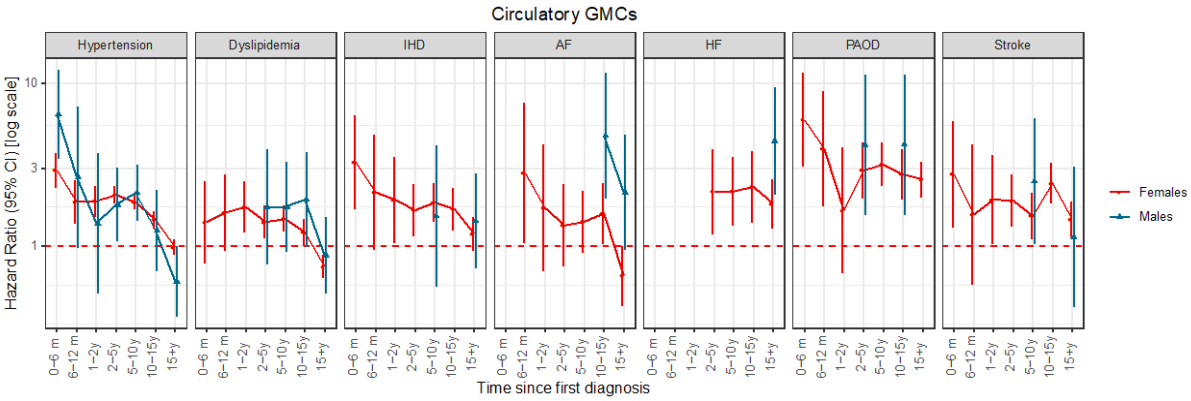


Figure S58.2 - Endocrine Conditions

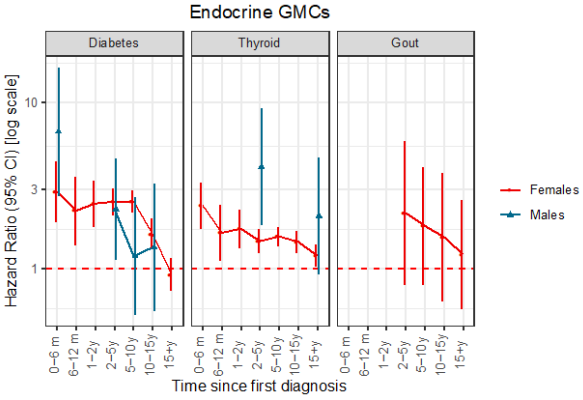


Figure S58.3 - Pulmonary Conditions

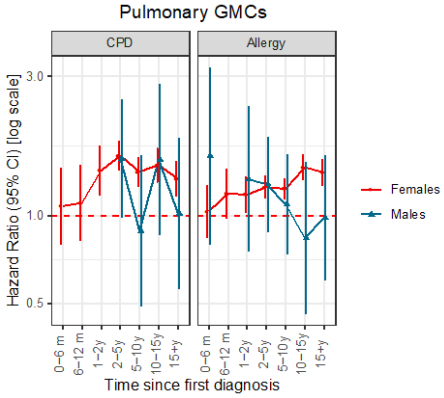


Figure S58.4 - Gastrointestinal Conditions

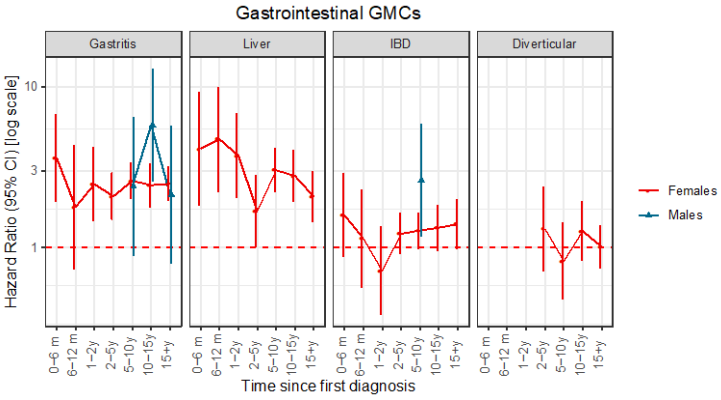


Figure S58.5 - Urogenital Conditions

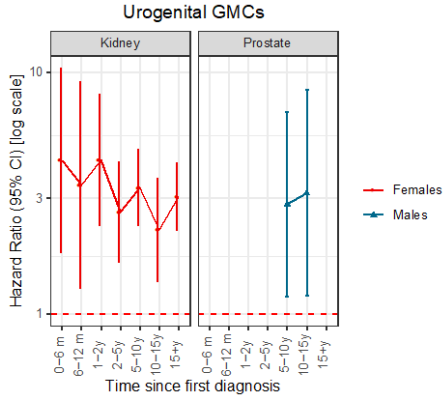


Figure S58.6 - Musculoskeletal Conditions

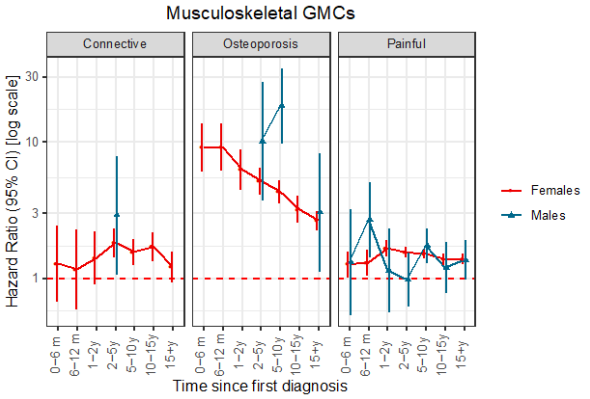


Figure S58.7 - Hematological Conditions

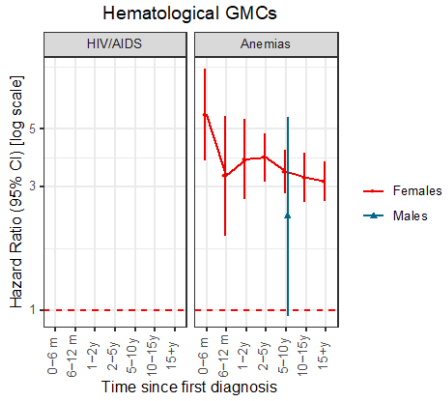


Figure S58.8 – Cancer

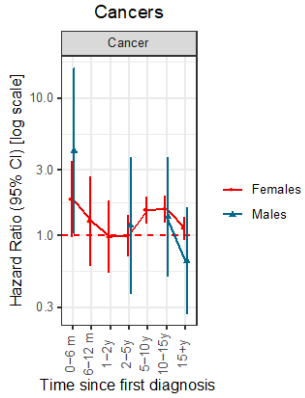
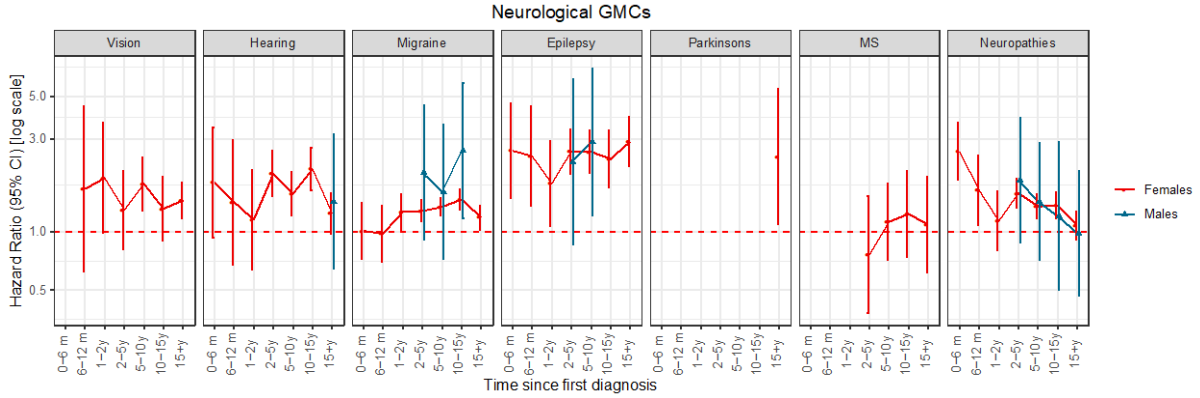


Figure S58.9 - Neurological Conditions



Figures S59.1-S59.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Personality Disorders, depending on time since first diagnosis

Figure S59.1 - Circulatory Conditions

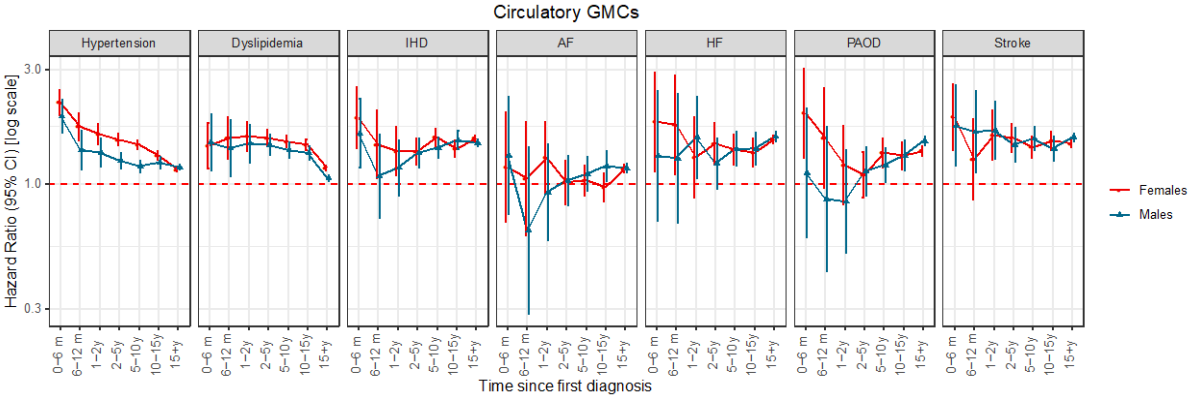


Figure S59.2 - Endocrine Conditions

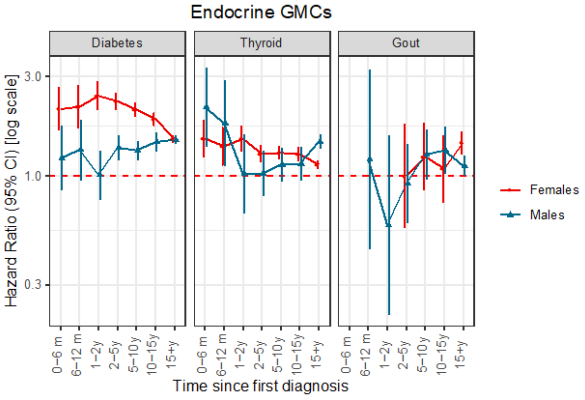


Figure S59.3 - Pulmonary Conditions

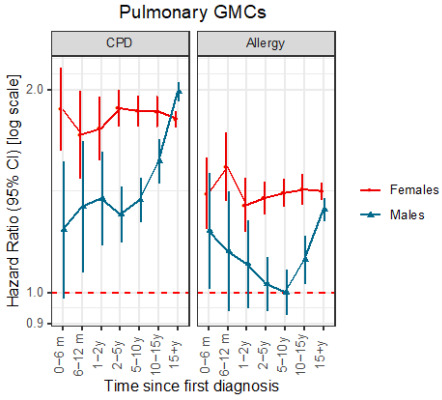


Figure S59.4 - Gastrointestinal Conditions

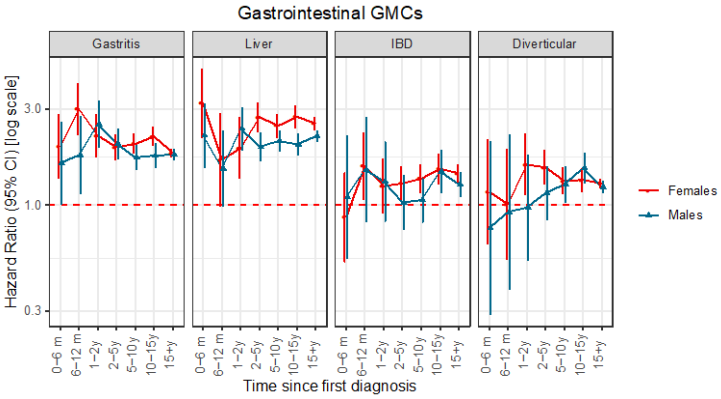


Figure S59.5 - Urogenital Conditions

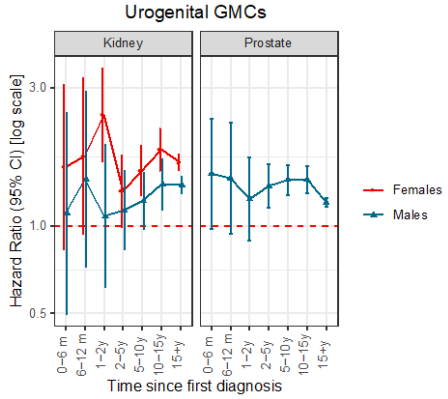


Figure S59.6 - Musculoskeletal Conditions

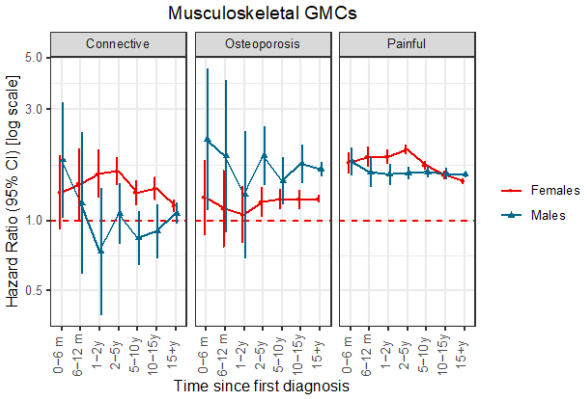


Figure S59.7 - Hematological Conditions

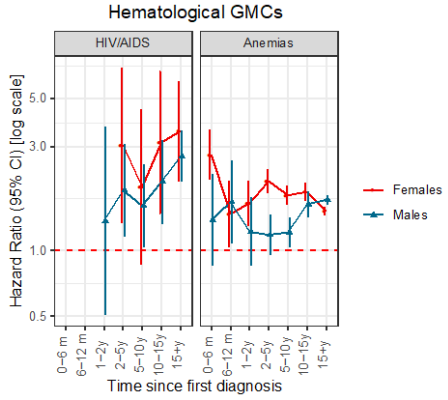


Figure S59.8 – Cancer

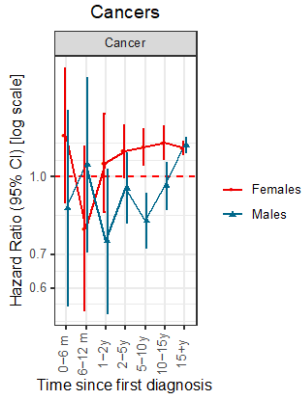
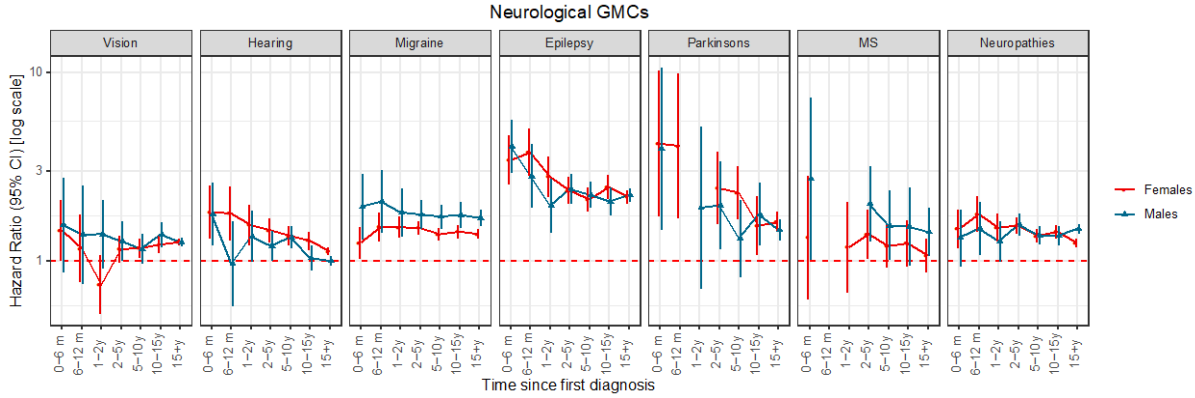


Figure S59.9 - Neurological Conditions



Figures S60.1-S60.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Intellectual Disabilities, depending on time since first diagnosis

Figure S60.1 - Circulatory Conditions

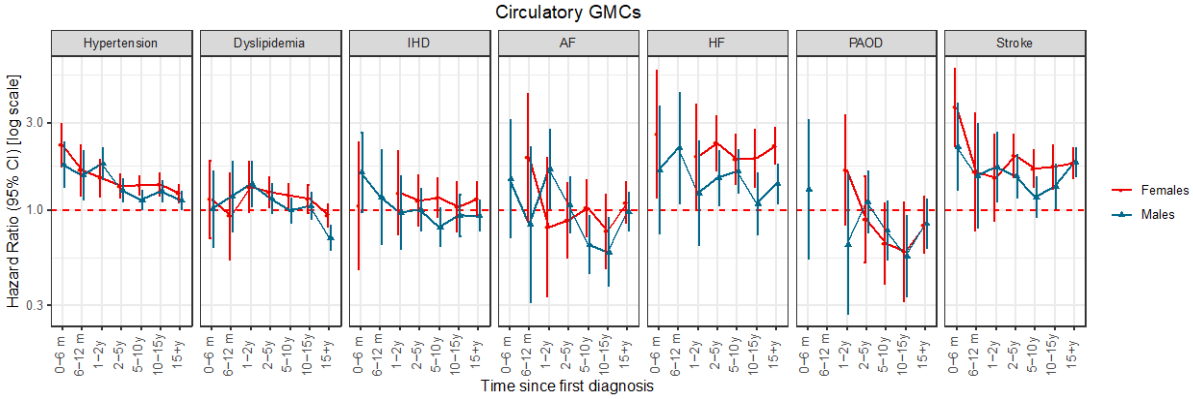


Figure S60.2 - Endocrine Conditions

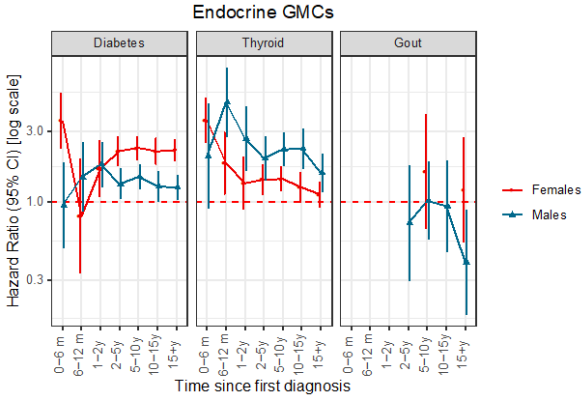


Figure S60.3 - Pulmonary Conditions

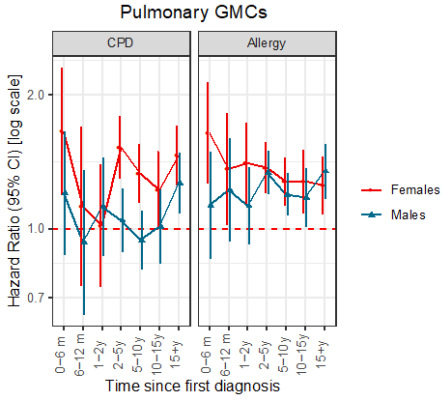


Figure S60.4 - Gastrointestinal Conditions

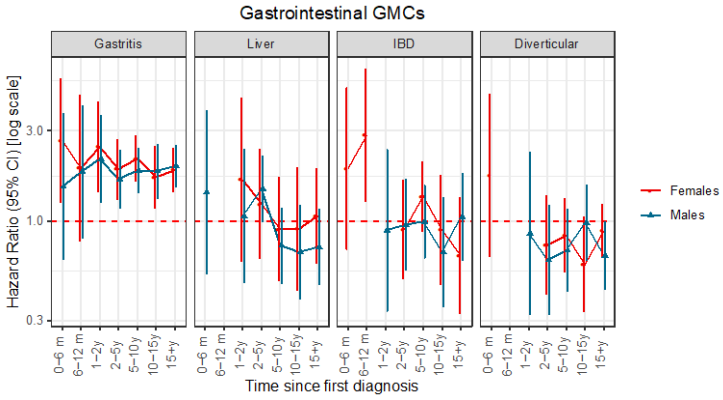


Figure S60.5 - Urogenital Conditions

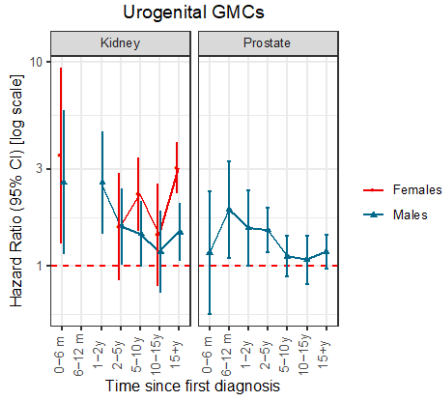


Figure S60.6 - Musculoskeletal Conditions

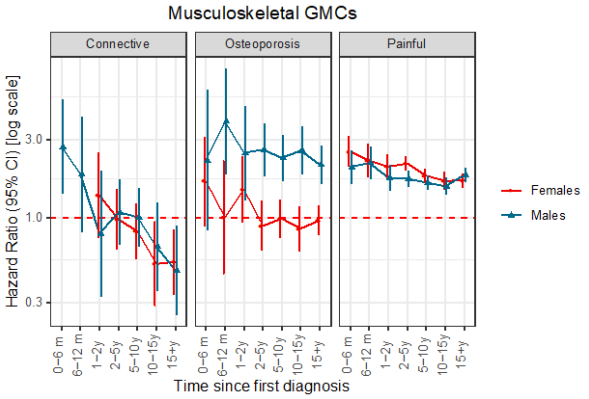


Figure S60.7 - Hematological Conditions

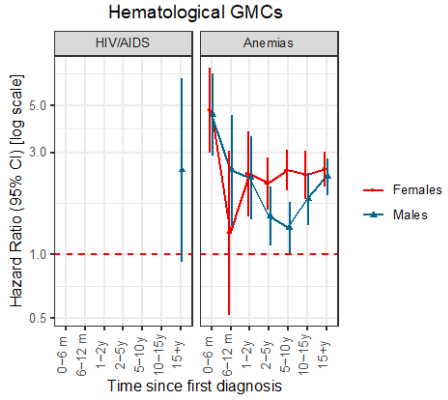


Figure S60.8 – Cancer

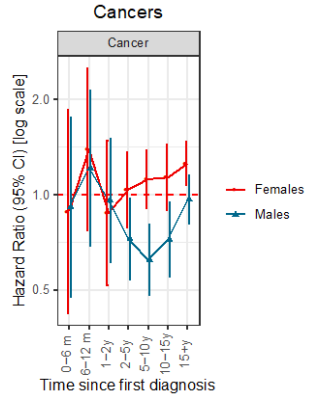
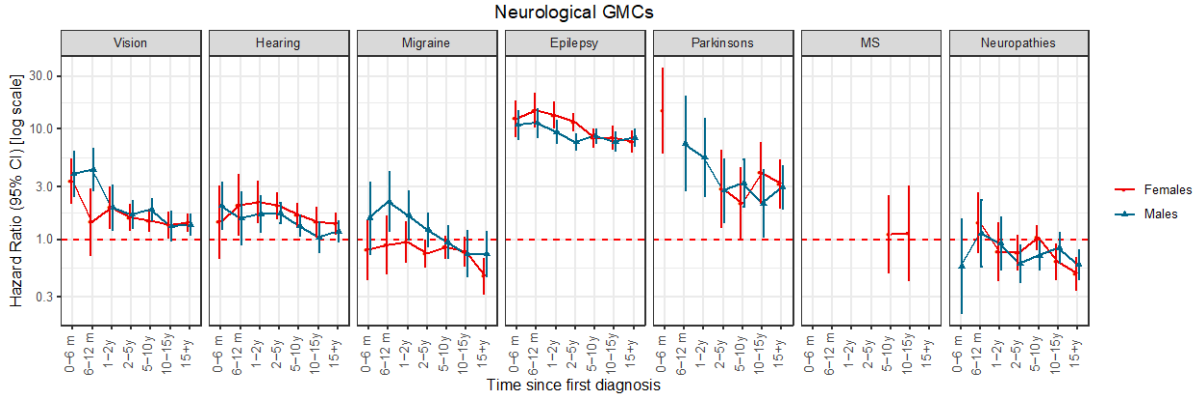


Figure S60.9 - Neurological Conditions



Figures S61.1-S61.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Developmental Disorders, depending on time since first diagnosis

Figure S61.1 - Circulatory Conditions

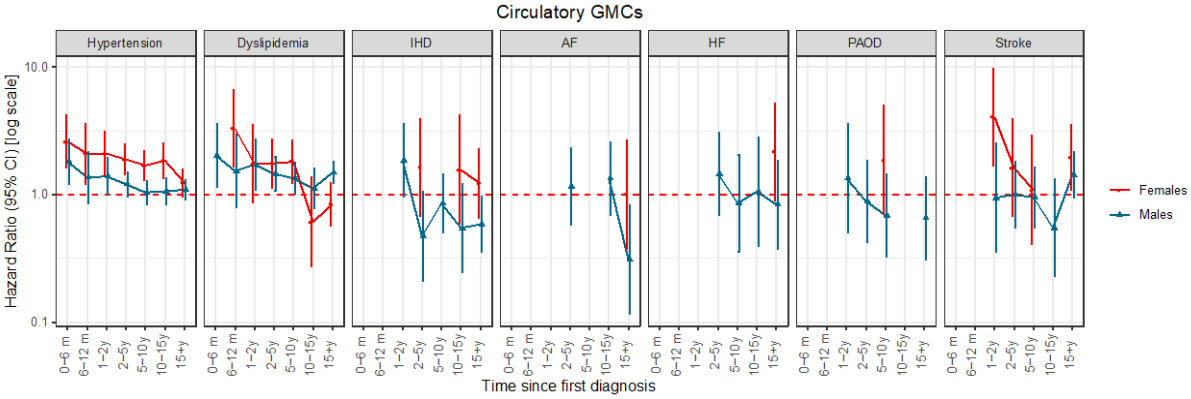


Figure S61.2 - Endocrine Conditions

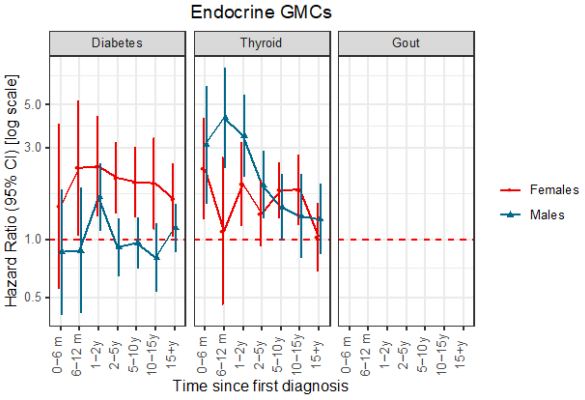


Figure S61.3 - Pulmonary Conditions

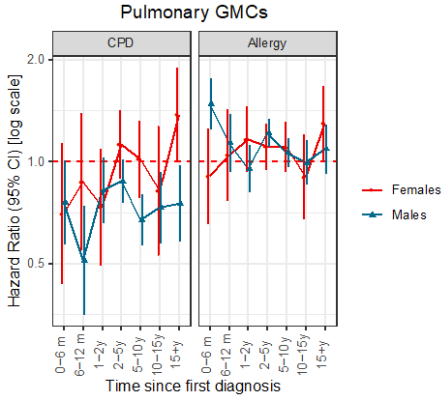


Figure S61.4 - Gastrointestinal Conditions

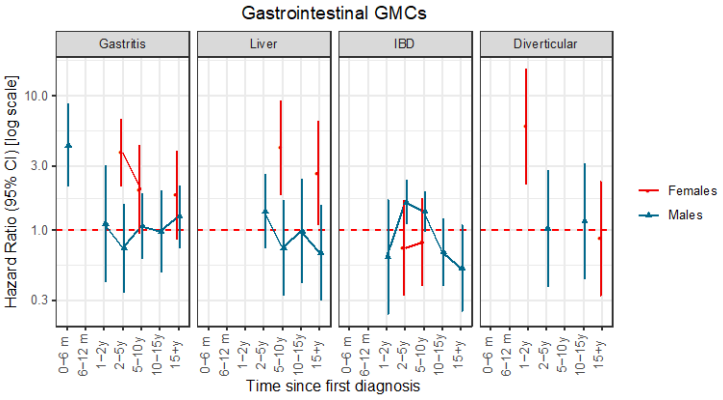


Figure S61.5 - Urogenital Conditions

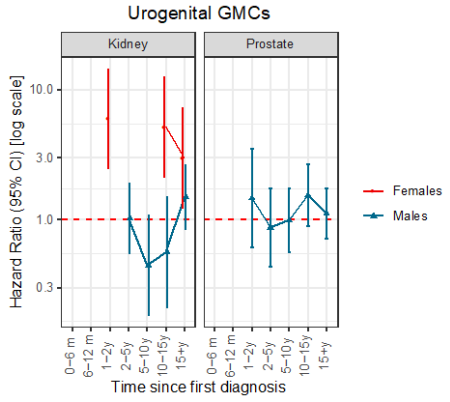


Figure S61.6 - Musculoskeletal Conditions

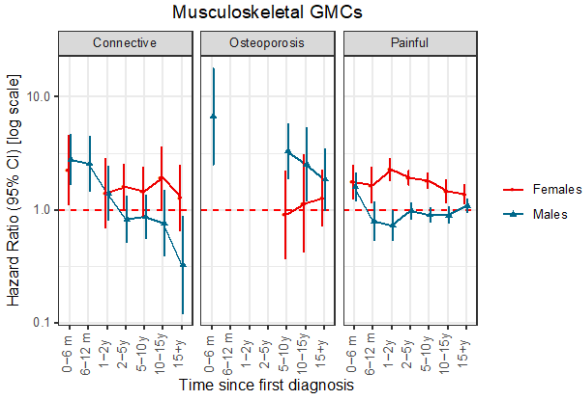


Figure S61.7 - Hematological Conditions

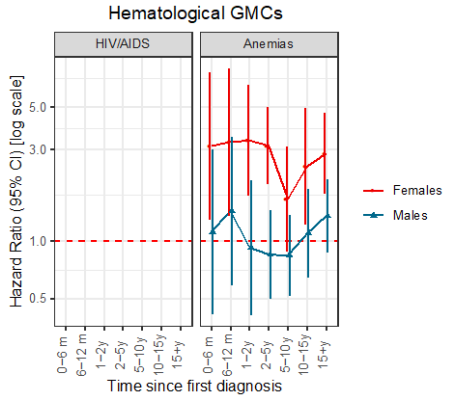


Figure S61.8 – Cancer

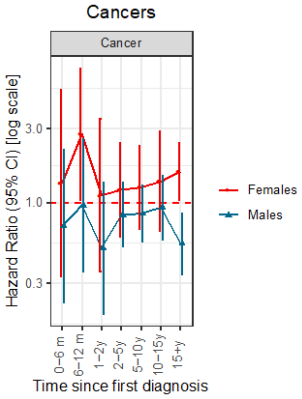
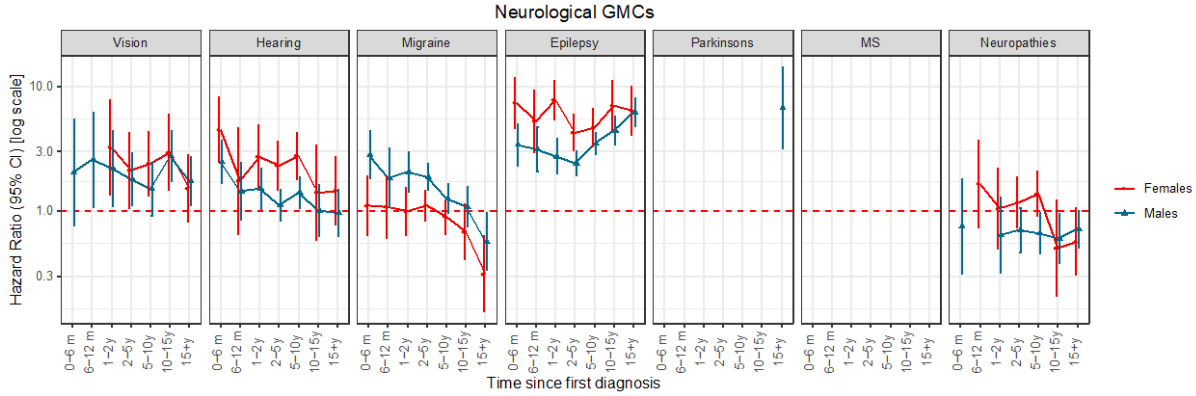


Figure S61.9 - Neurological Conditions



Figures S62.1-S62.9. Sex-specific HRs and 95% CIs of being diagnosed with each medical condition comparing those with and without a prior diagnosis of Behavioral Disorders, depending on time since first diagnosis

Figure S62.1 - Circulatory Conditions

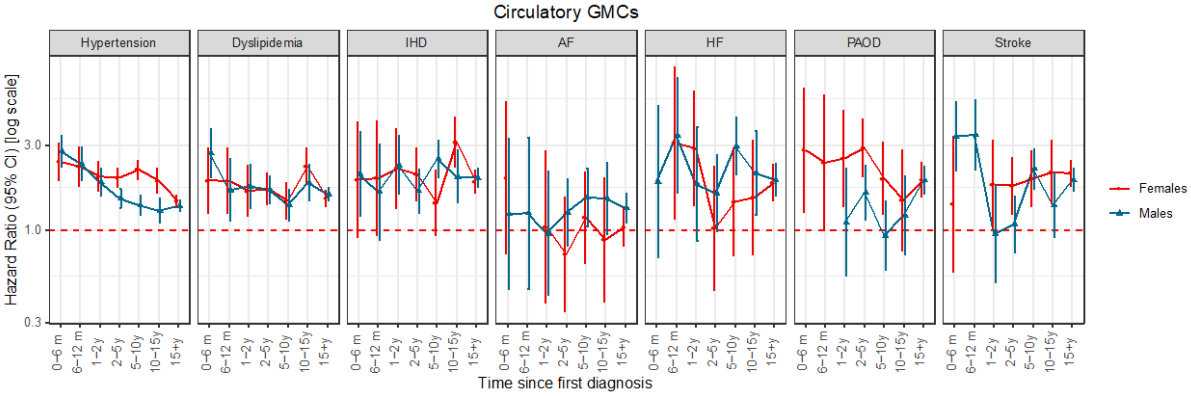


Figure S62.2 - Endocrine Conditions

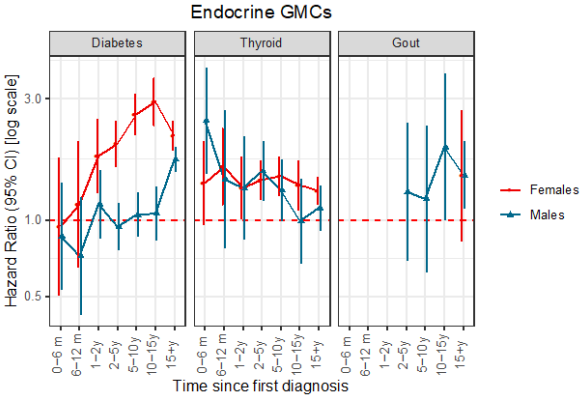


Figure S62.3 - Pulmonary Conditions

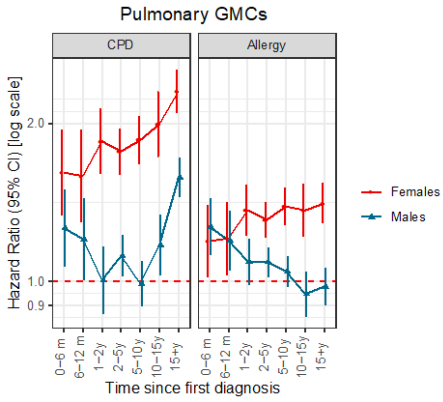


Figure S62.4 - Gastrointestinal Conditions

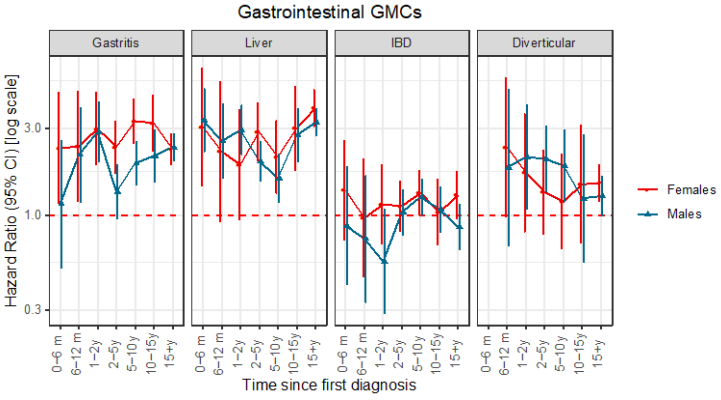


Figure S62.5 - Urogenital Conditions

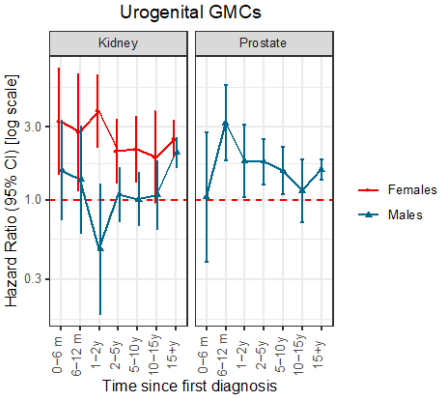


Figure S62.6 - Musculoskeletal Conditions

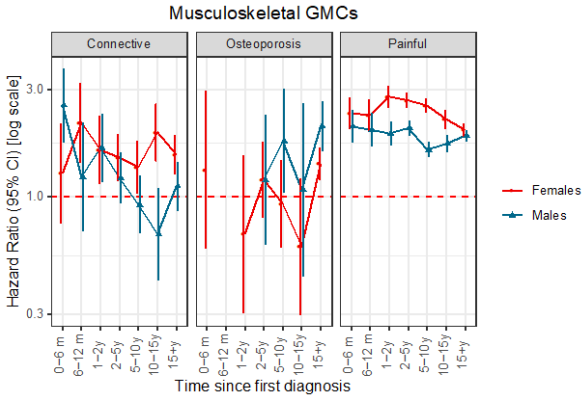


Figure S62.7 - Hematological Conditions

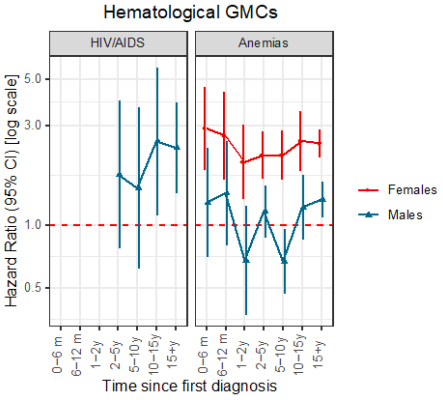


Figure S62.8 – Cancer

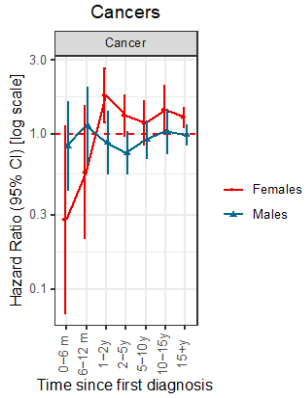
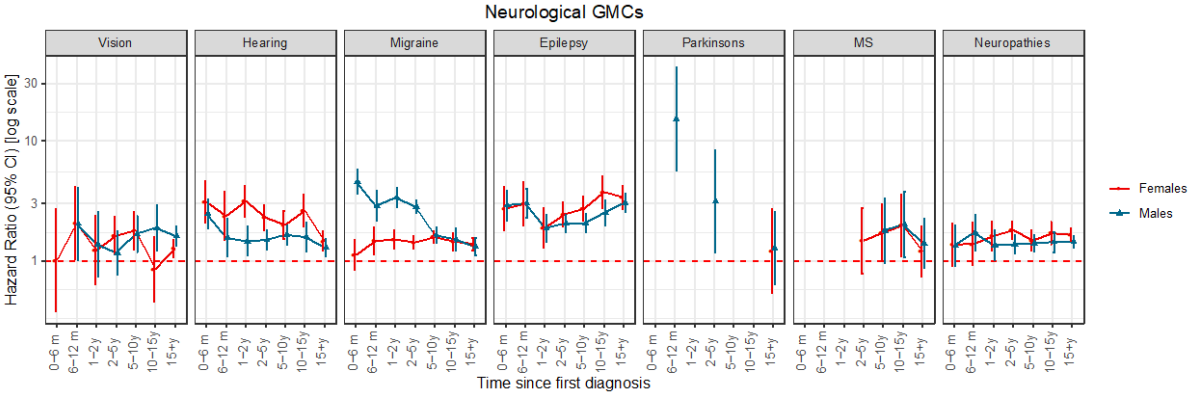


Figure S62.9 - Neurological Conditions



Figures S63-S82. Absolute risks of general medical condition categories after diagnosis of mental disorders

The following set of figures shows the sex- and time-specific absolute risks of being diagnosed with all medical conditions after being previously diagnosed with one of the mental disorders. They show the cumulative incidence proportions (CIPs) and 95% confidence intervals (95% CIs) estimated across all ages of being diagnosed with each medical condition (shown as label at the top of each panel). Each person diagnosed with specific mental disorder was matched to up to five 'reference individuals' of the same sex and born within 30 days of them. CIPs are shown for both those who were diagnosed with specific mental disorder from the time of diagnosis (bold, solid line) and the reference group (dashed lines).

Two graphs are provided for each mental disorder: CIPs for all persons (black lines) and sex-specific CIPs (males indicated by blue lines, females by red). Confidence intervals are displayed only for those with prior mental disorders, as the 95% CIs for the reference group will be proportional to those for people with prior mental disorders, but smaller. In some cases, 95% CIs are too small to be visible.

The horizontal axes show the time since first diagnosis of the mental disorder (or since diagnosis of the person the reference individuals were matched to). The vertical axes show the cumulative incidence proportions and 95% CIs (note these axes vary for each set of graphs).

Estimates with fewer than 50 persons at risk or fewer than 15 cases are not shown. Where numbers were too small to show CIPs for those with mental disorders, reference CIPs are not displayed either.

Displaying estimates for all persons

The y-axis varies for each graph, however they range from 0 to a maximum of 68

S63. Organic Disorders
S64. Substance Use Disorders
S65. Schizophrenia
S66. Mood Disorders
S67. Neurotic Disorders
S68. Eating Disorders
S69. Personality Disorders
S70. Intellectual Disorders
S71. Developmental Disorders
S72. Behavioral Disorders

Displaying sex-specific estimates

The y-axis varies for each graph, however they range from 0 to a maximum of 71

S73. Organic Disorders
S74. Substance Use Disorders
S75. Schizophrenia
S76. Mood Disorders
S77. Neurotic Disorders
S78. Eating Disorders
S79. Personality Disorders
S80. Intellectual Disorders
S81. Developmental Disorders
S82. Behavioral Disorders

Figure S63. Absolute risks of being diagnosed with each medical condition after first diagnosis of Organic Disorders

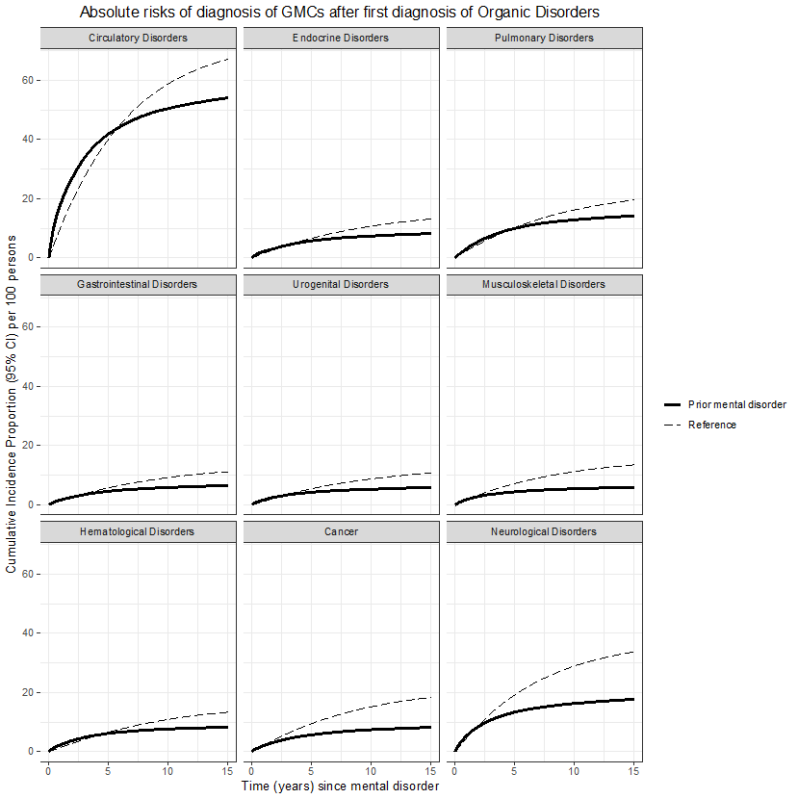


Figure S64. Absolute risks of being diagnosed with each medical condition after first diagnosis of Substance Use Disorders

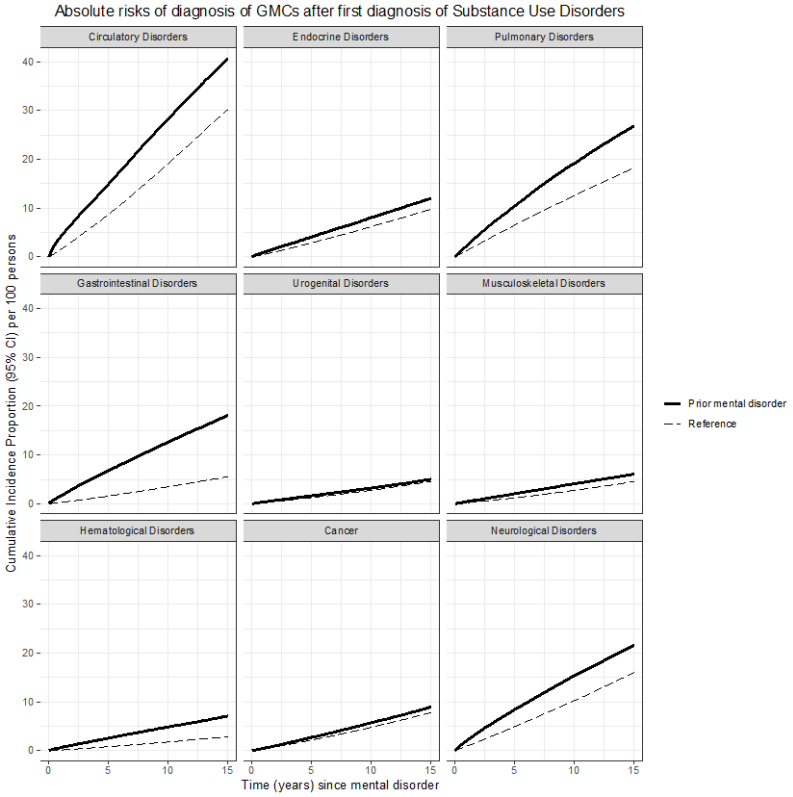


Figure S65. Absolute risks of being diagnosed with each medical condition after first diagnosis of Schizophrenia

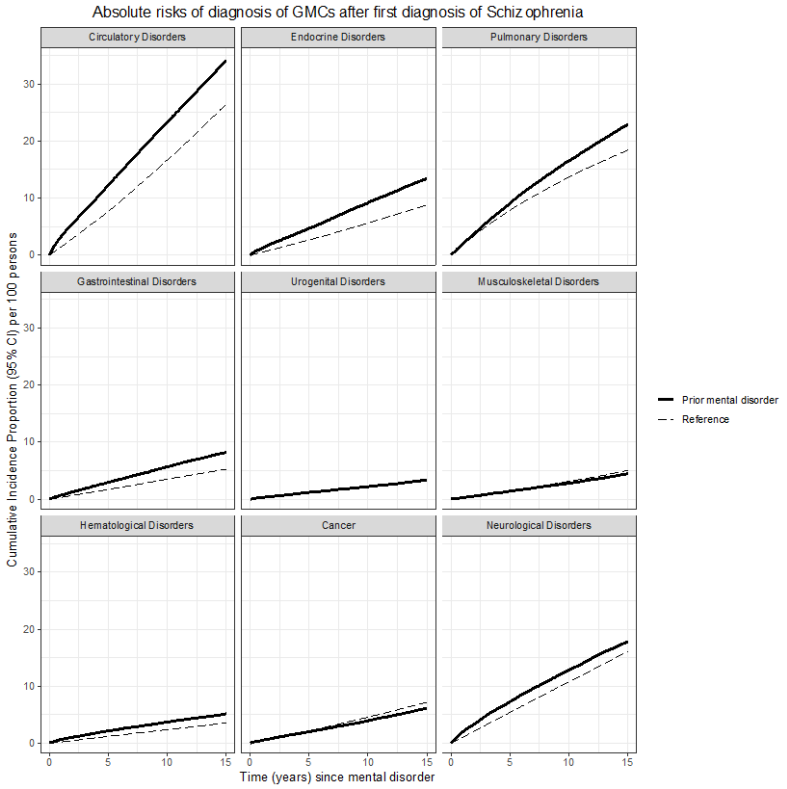


Figure S66. Absolute risks of being diagnosed with each medical condition after first diagnosis of Mood Disorders

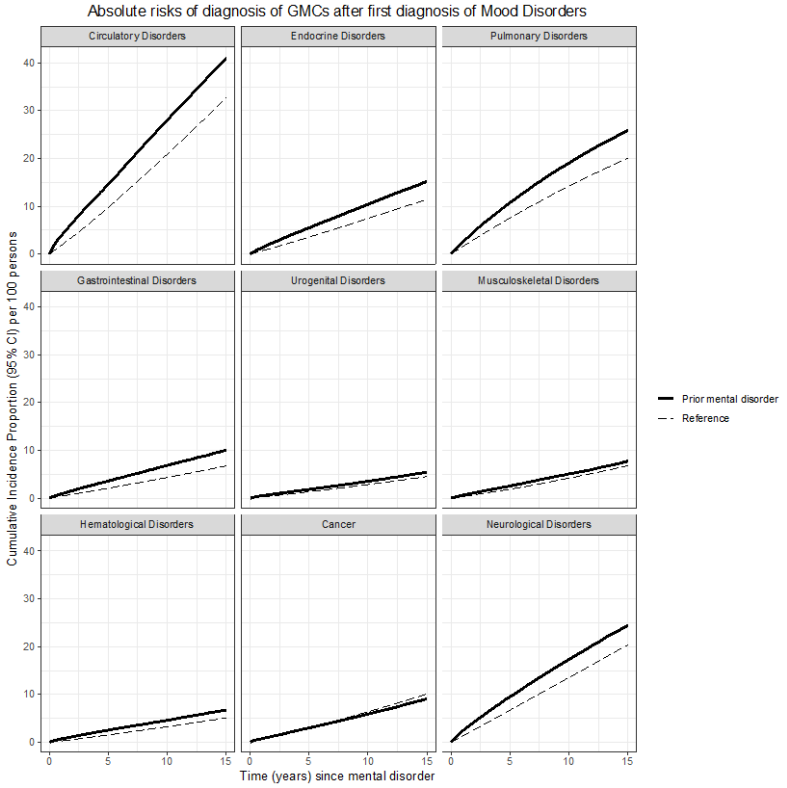


Figure S67. Absolute risks of being diagnosed with each medical condition after first diagnosis of Neurotic Disorders

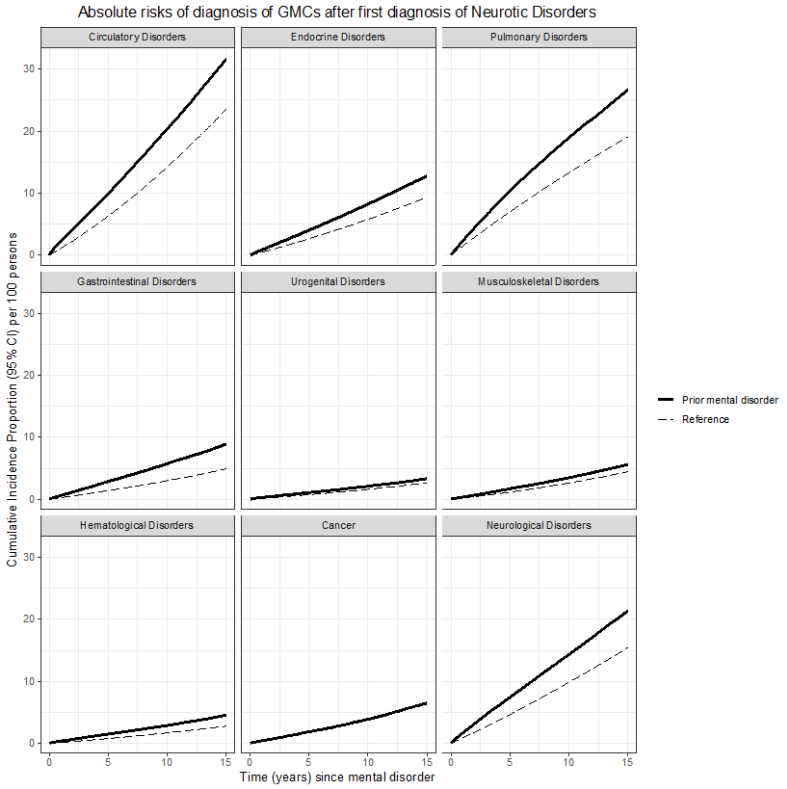


Figure S68. Absolute risks of being diagnosed with each medical condition after first diagnosis of Eating Disorders

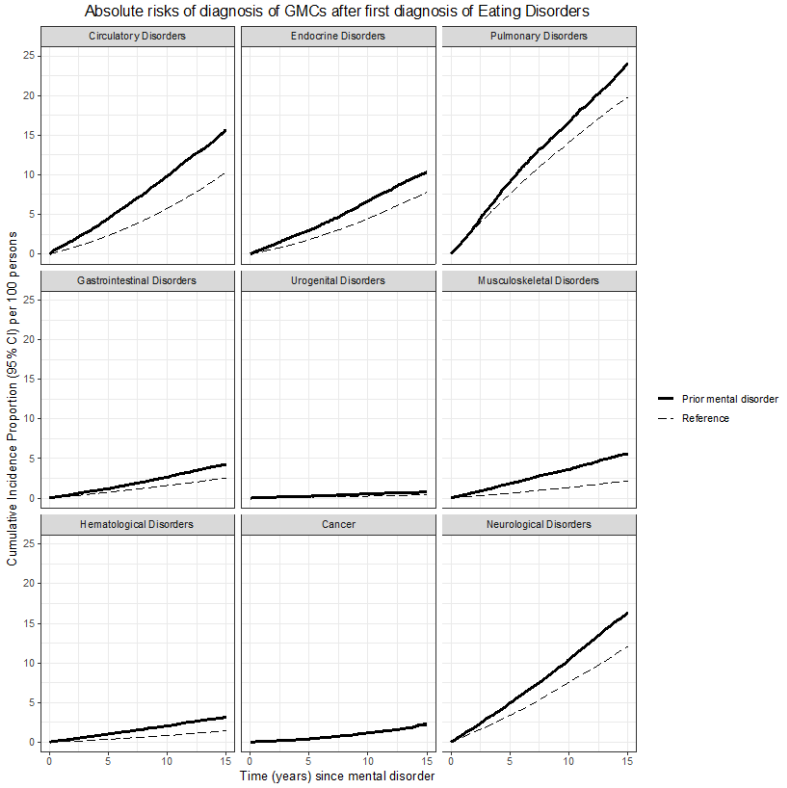


Figure S69. Absolute risks of being diagnosed with each medical condition after first diagnosis of Personality Disorders

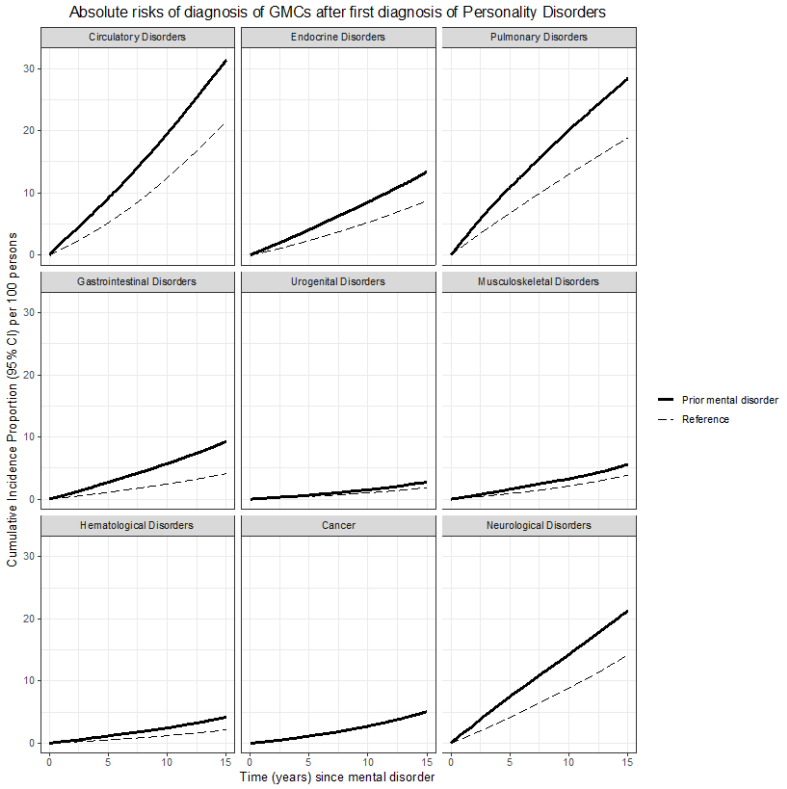


Figure S70. Absolute risks of being diagnosed with each medical condition after first diagnosis of Intellectual Disabilities

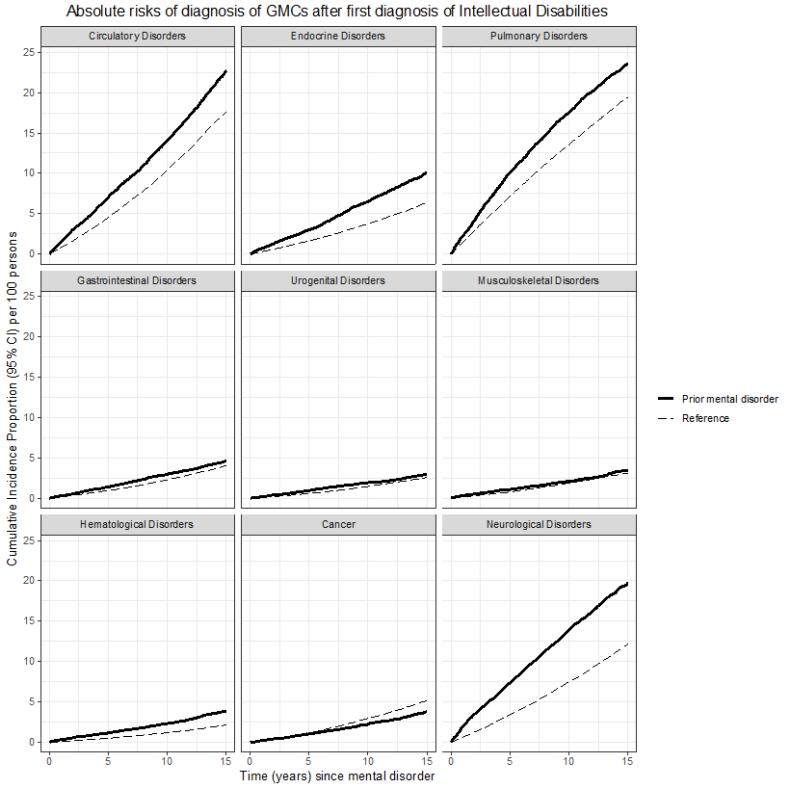


Figure S71. Absolute risks of being diagnosed with each medical condition after first diagnosis of Developmental Disorders

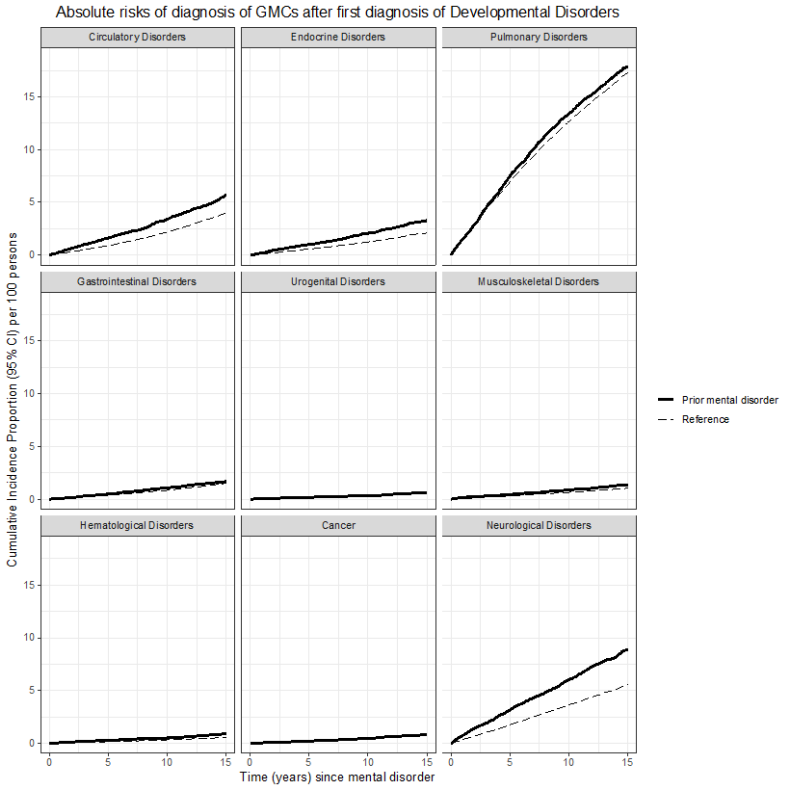


Figure S72. Absolute risks of being diagnosed with each medical condition after first diagnosis of Behavioral Disorders

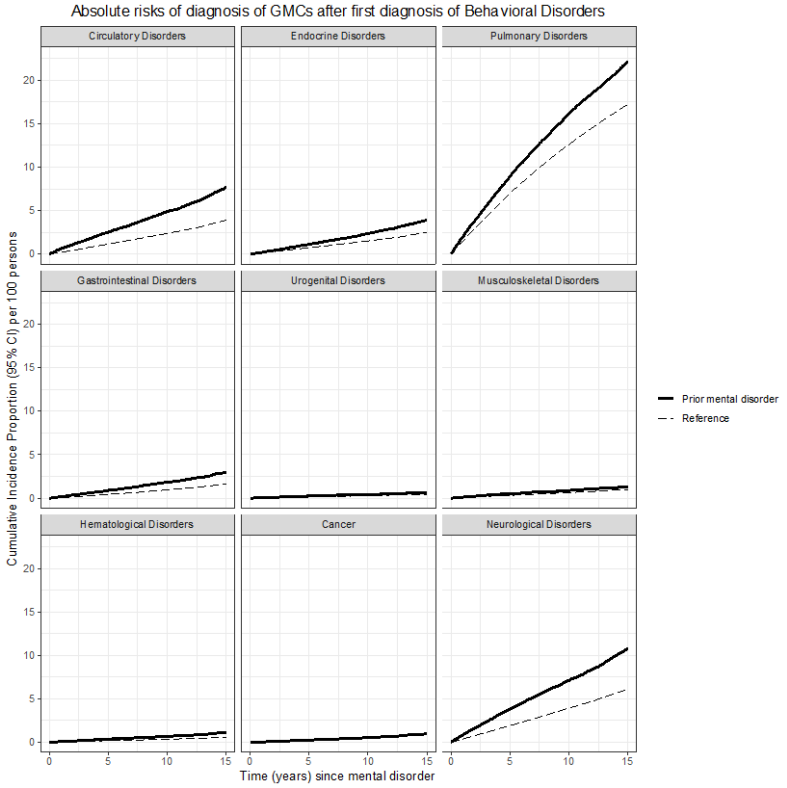


Figure S73. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Organic Disorders

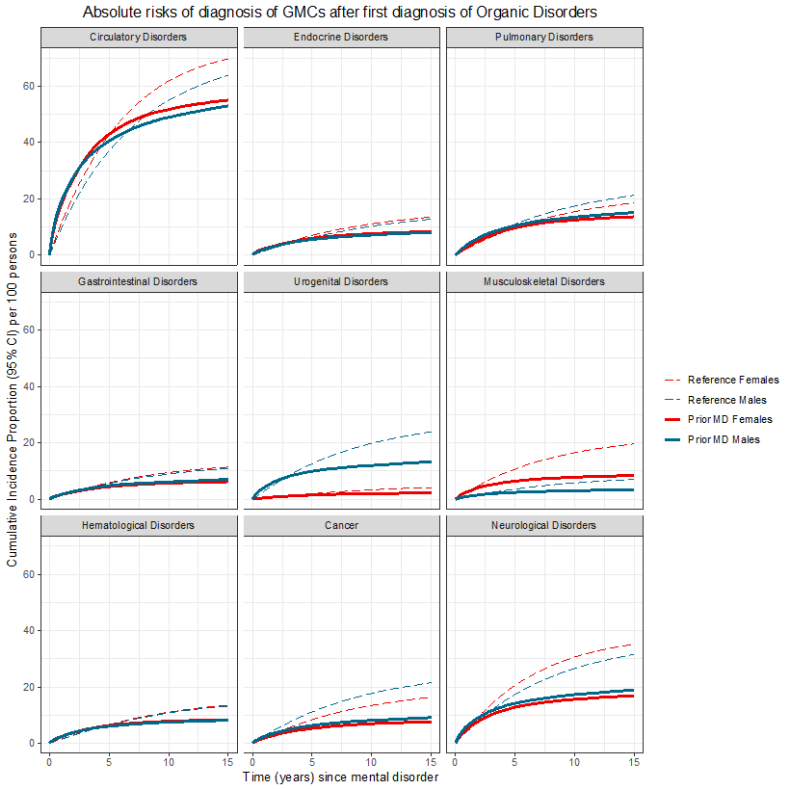


Figure S74. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Substance Use Disorders

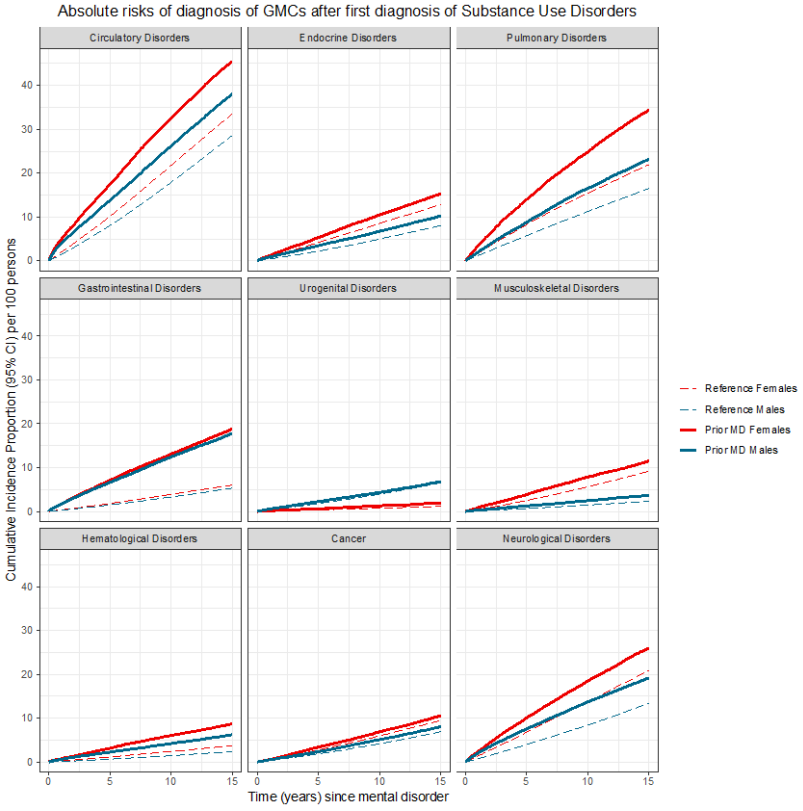


Figure S75. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Schizophrenia

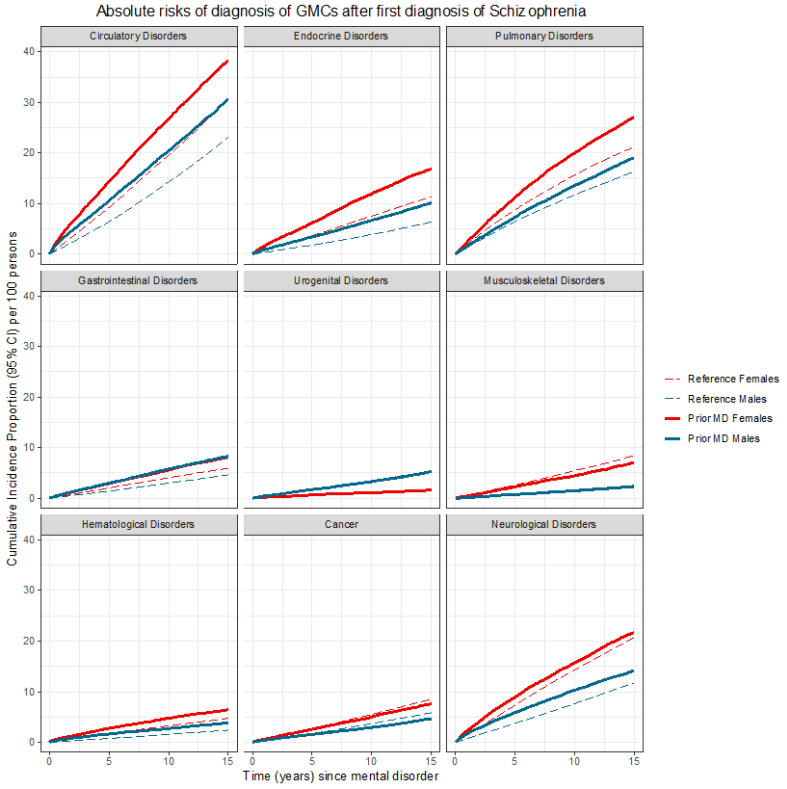


Figure S76. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Mood Disorders

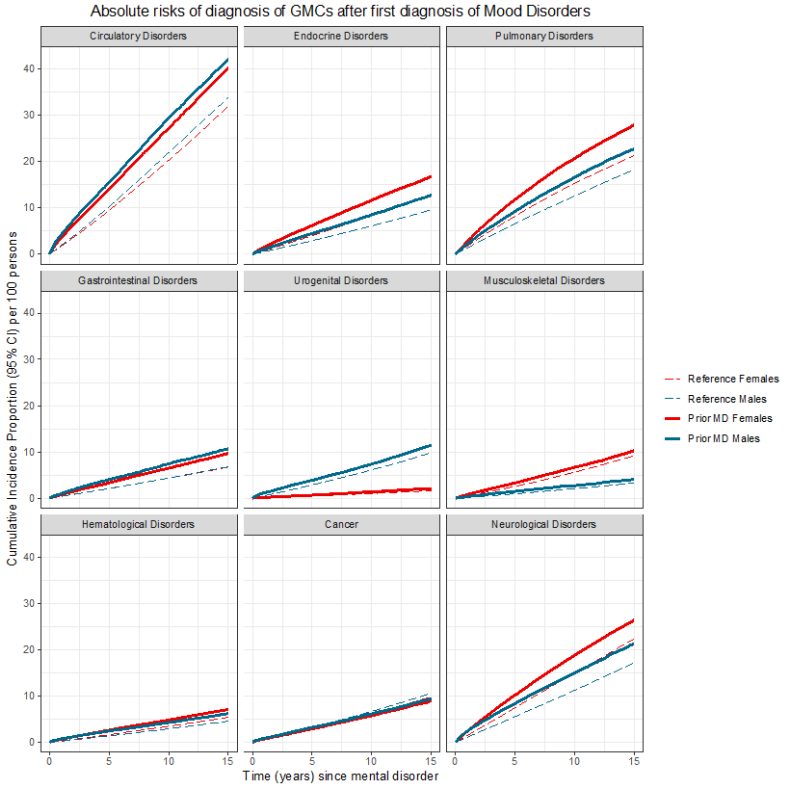


Figure S77. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Neurotic Disorders

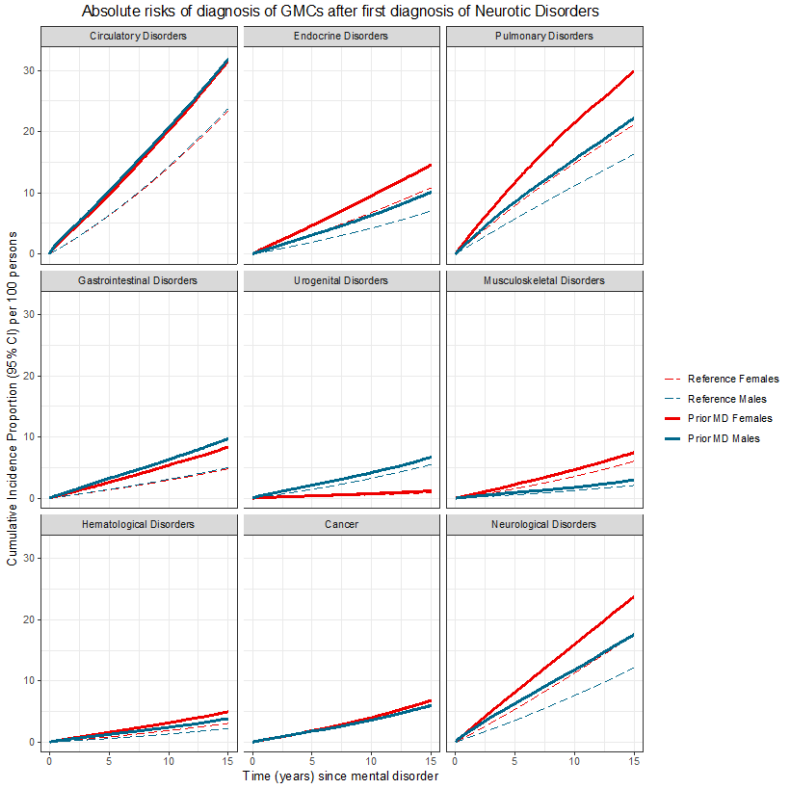


Figure S78. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Eating Disorders

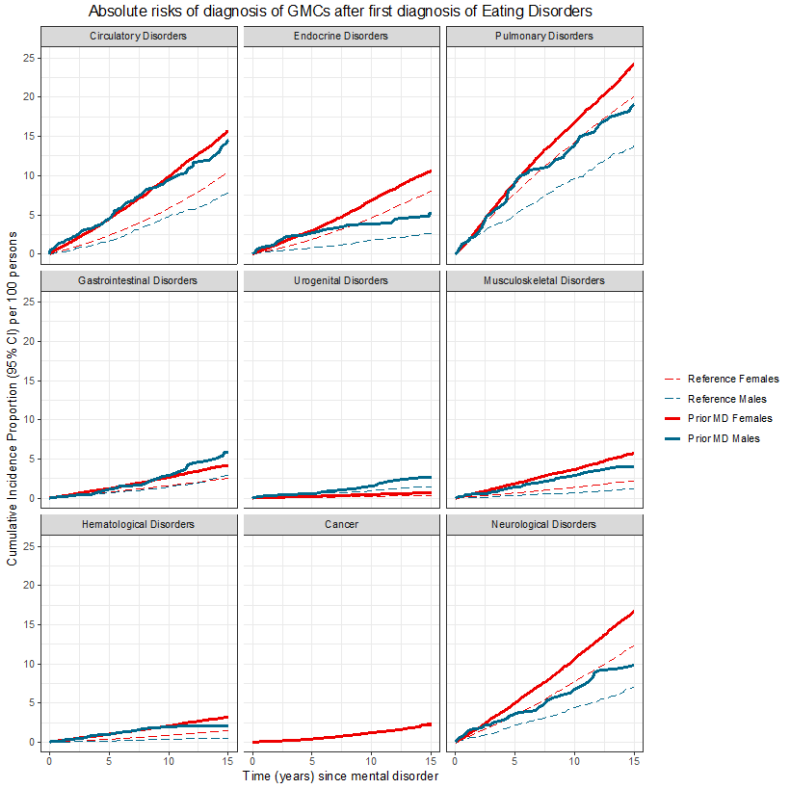


Figure S79. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Personality Disorders

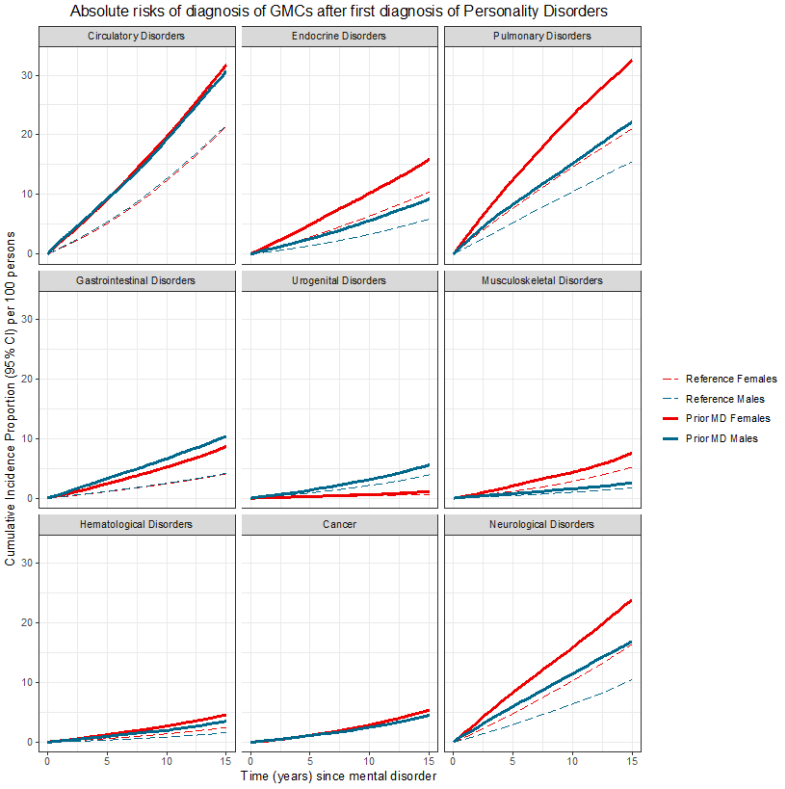


Figure S80. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Intellectual Disabilities

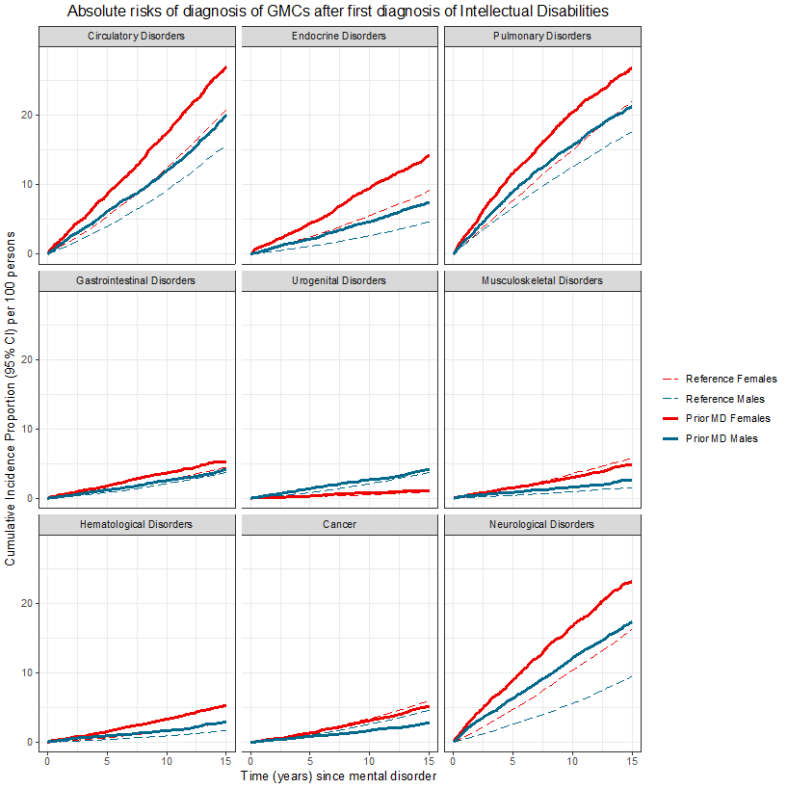


Figure S81. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Developmental Disorders

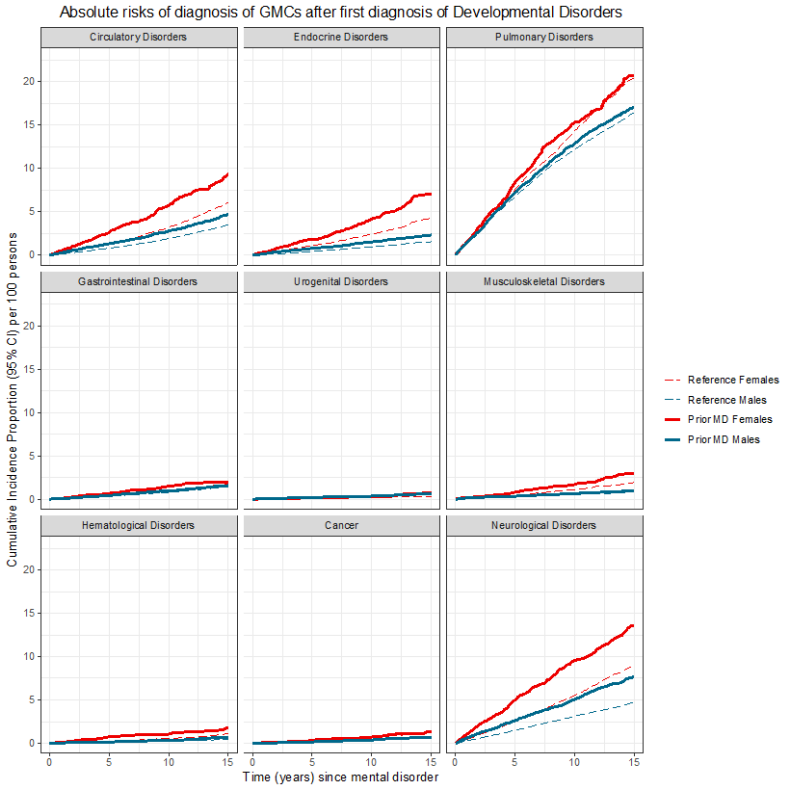
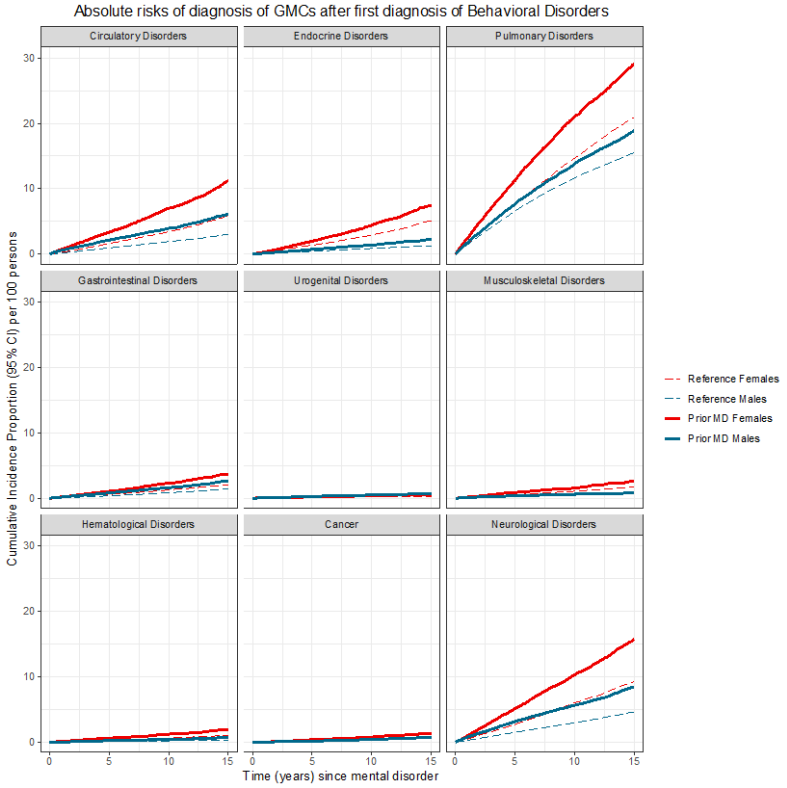


Figure S82. Sex-specific absolute risks of being diagnosed with each medical condition after first diagnosis of Behavioral Disorders



Figures S83-S102. Absolute risks of general medical condition categories after diagnosis of mental disorders, depending on age at first onset of the mental disorder

The following set of figures shows the sex- and time-specific absolute risks of being diagnosed with all medical conditions after being previously diagnosed with one of the mental disorders, depending on age at first diagnosis of the mental disorder. They show the cumulative incidence proportions (CIPs) and 95% confidence intervals (shaded area) estimated across all ages of being diagnosed with each medical condition (shown as label at the top of each panel). Each person diagnosed with specific mental disorder was matched to up to five 'reference individuals' of the same sex and born within 30 days of them.

For each mental disorder-medical condition pair, graphs are provided to show all persons (black lines) and sex-specific CIPs (blue lines for males and red for females). CIPs are displayed for those who were diagnosed with specific mental disorder from the time of diagnosis (solid bold line in the respective colours) and the reference group (dashed line in the respective colours). Confidence intervals are displayed only for those with prior mental disorders, as confidence intervals for the reference group will be proportional to those for people with prior mental disorders, but smaller. In some cases, 95% CIs are too small to be visible.

The horizontal axes show the time since first diagnosis of the mental disorder (or since diagnosis of the person the reference individuals were matched to). The vertical axes show the cumulative incidence proportions and 95% CIs (note these axes vary for each set of graphs).

Estimates with fewer than 50 persons at risk or fewer than 15 cases are not shown, but blank 'place-holder' graphs are displayed to indicate that estimates do not appear due to lack of numbers. Where numbers were too small to show CIPs for those with mental disorders, reference CIPs are not displayed either.

Displaying estimates for all persons

The y-axis varies for each graph, however they range from 0 to a maximum of 71

S83. Organic Disorders
S84. Substance Use Disorders
S85. Schizophrenia
S86. Mood Disorders
S87. Neurotic Disorders
S88. Eating Disorders
S89. Personality Disorders
S90. Intellectual Disorders
S91. Developmental Disorders
S92. Behavioral Disorders

Displaying sex-specific estimates

The y-axis varies for each graph, however they range from 0 to a maximum of 68

S93. Organic Disorders
S94. Substance Use Disorders
S95. Schizophrenia
S96. Mood Disorders
S97. Neurotic Disorders
S98. Eating Disorders
S99. Personality Disorders
S100. Intellectual Disorders
S101. Developmental Disorders
S102. Behavioral Disorders

Figures S83.1-S83.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Organic Disorders

Figure S83.1 – Circulatory Conditions

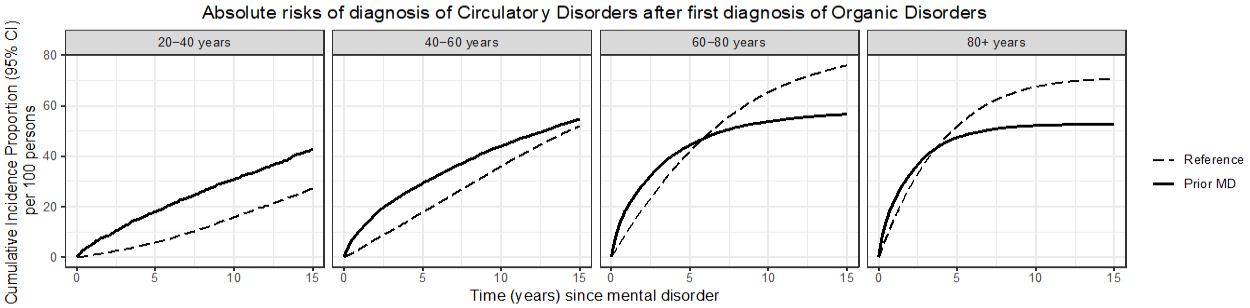


Figure S83.2 – Endocrine Conditions

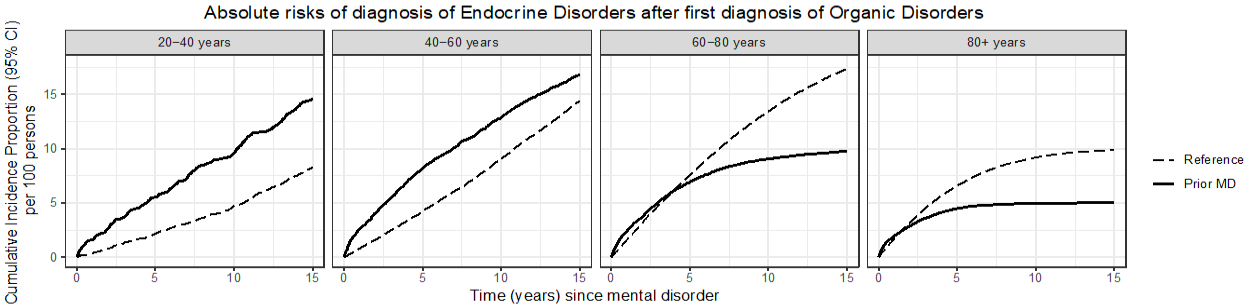


Figure S83.3 – Pulmonary Conditions

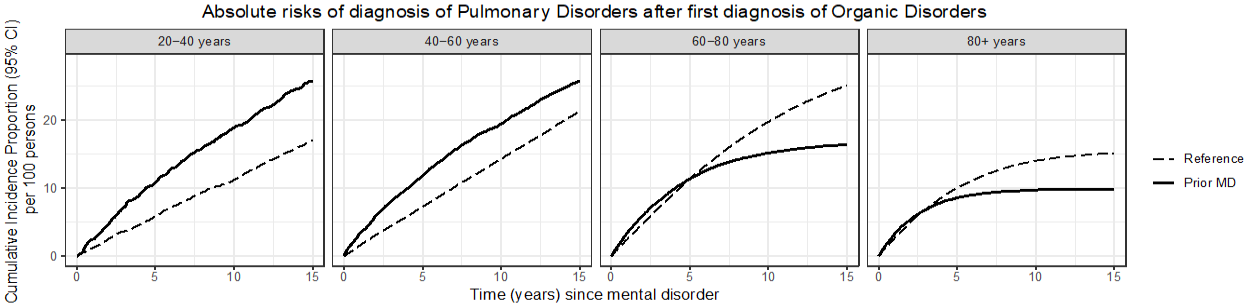


Figure S83.4 – Gastrointestinal Conditions

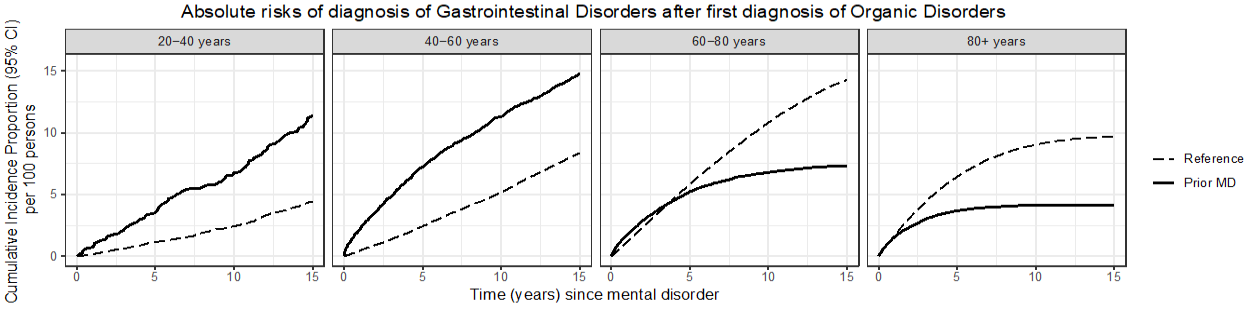


Figure S83.5 – Urogenital Conditions

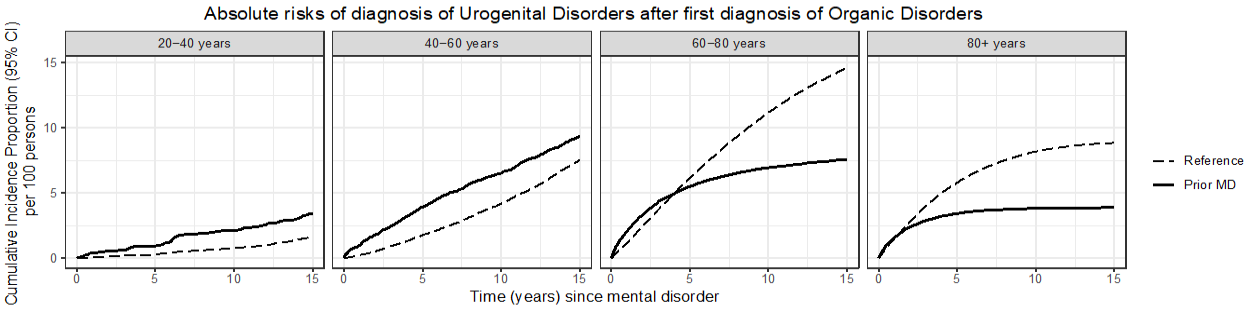


Figure S83.6 – Musculoskeletal Conditions

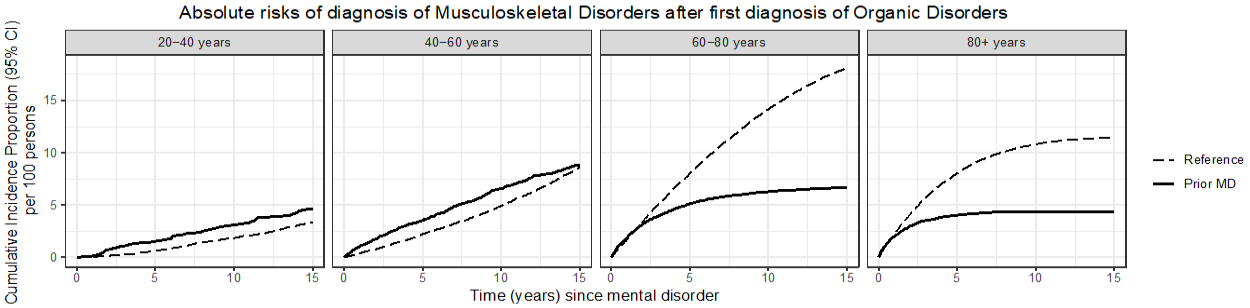


Figure S83.7 – Hematological Conditions

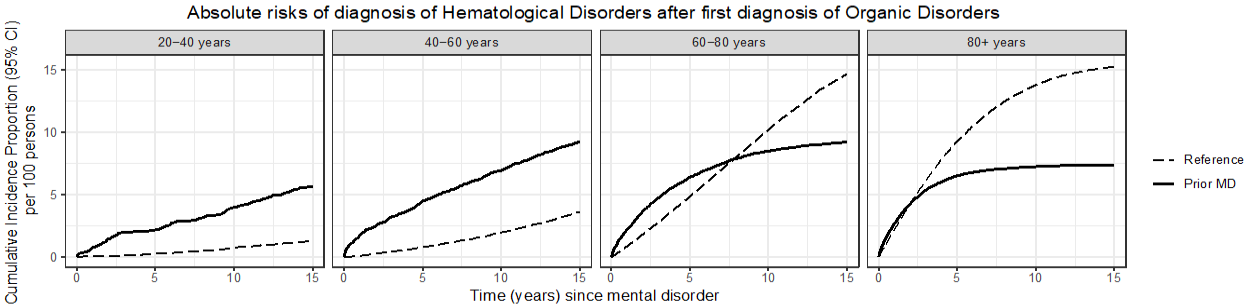


Figure S83.8 – Cancers

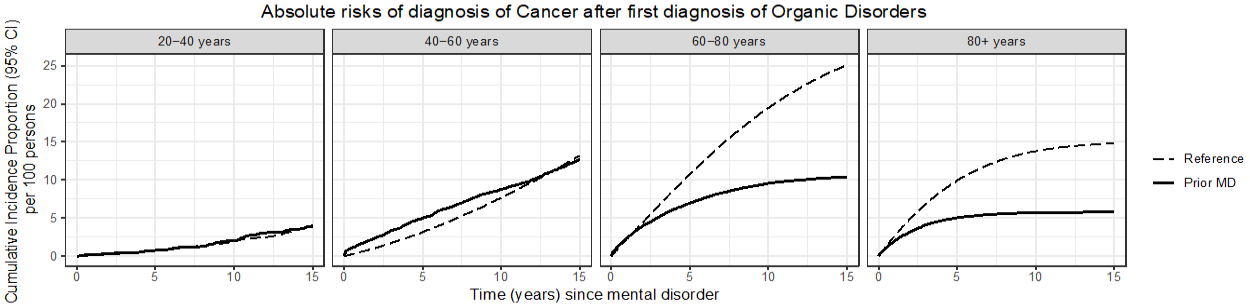
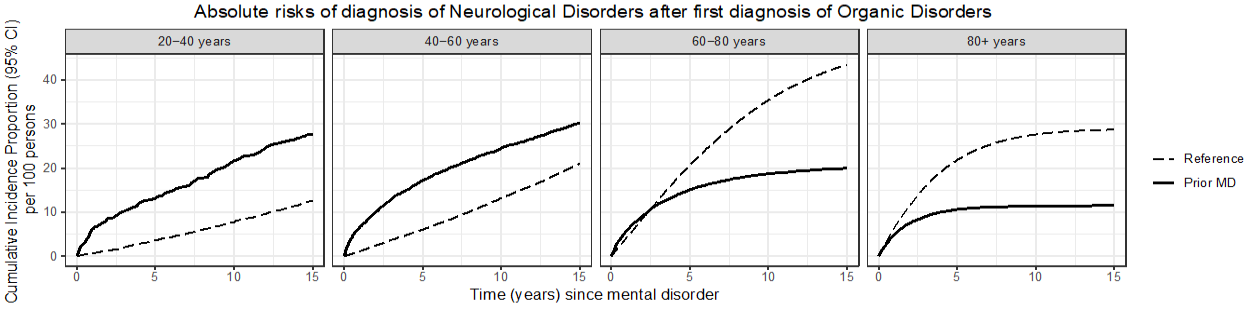


Figure S83.9 – Neurological Conditions



Figures S84.1-S84.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Substance Use Disorders

Figure S84.1 – Circulatory Conditions

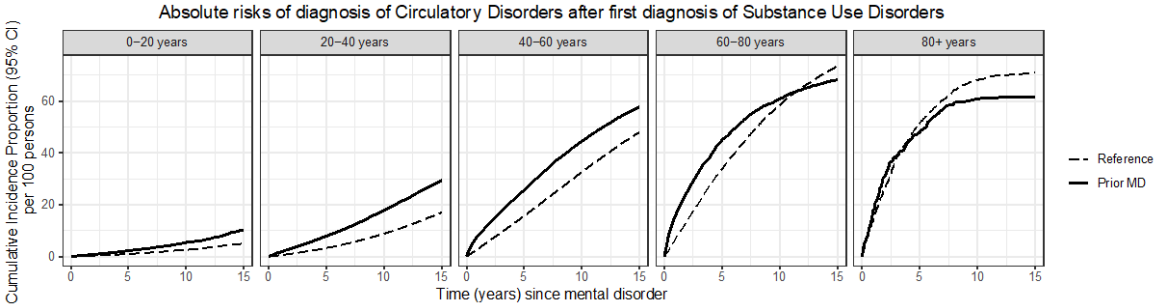


Figure S84.2 – Endocrine Conditions

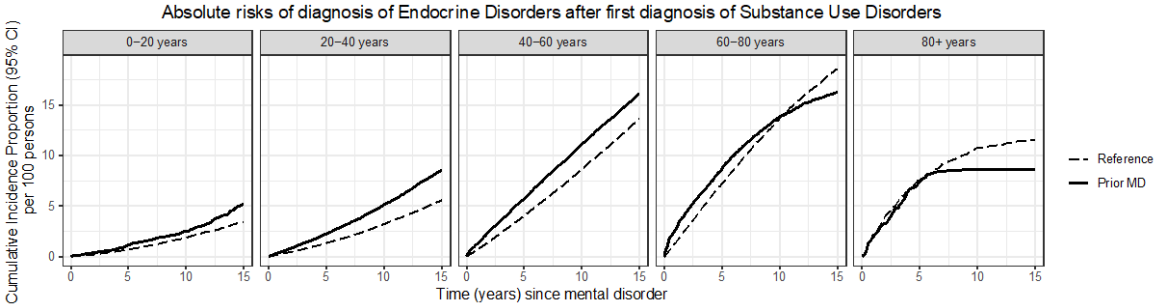


Figure S84.3 – Pulmonary Conditions

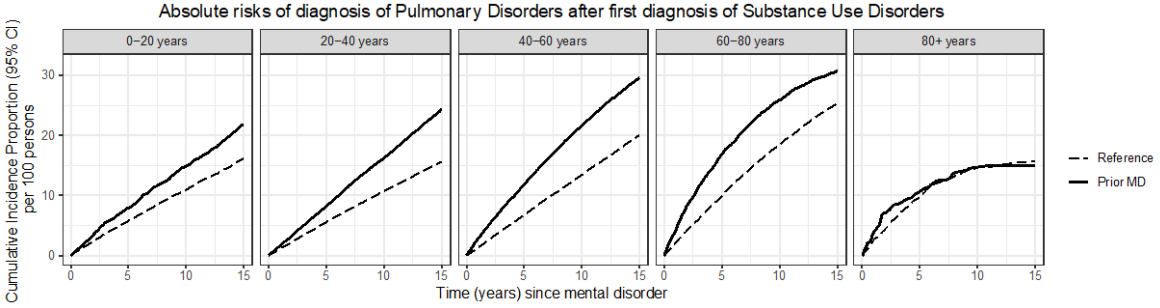


Figure S84.4 – Gastrointestinal Conditions

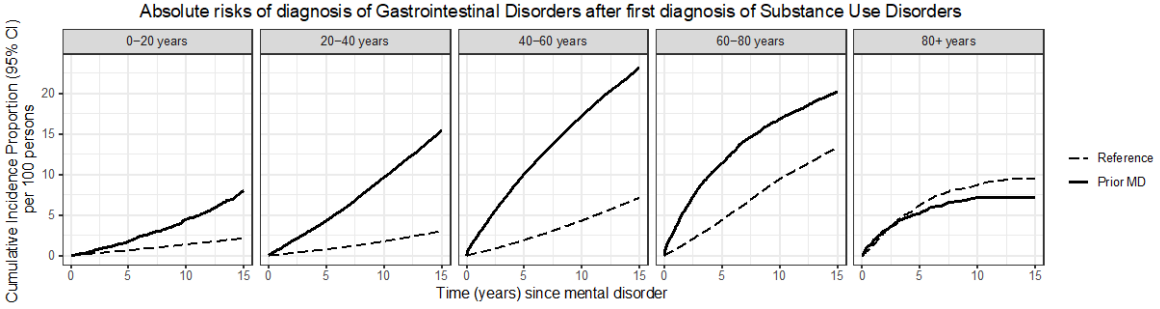


Figure S84.5 – Urogenital Conditions

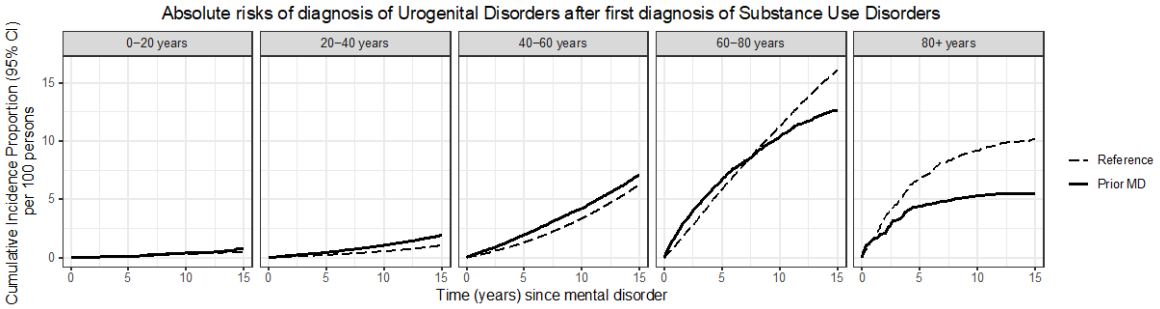


Figure S84.6 – Musculoskeletal Conditions

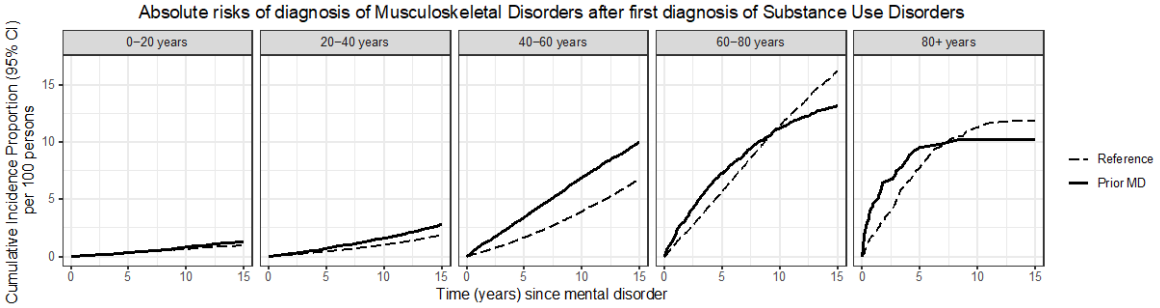


Figure S84.7 – Hematological Conditions

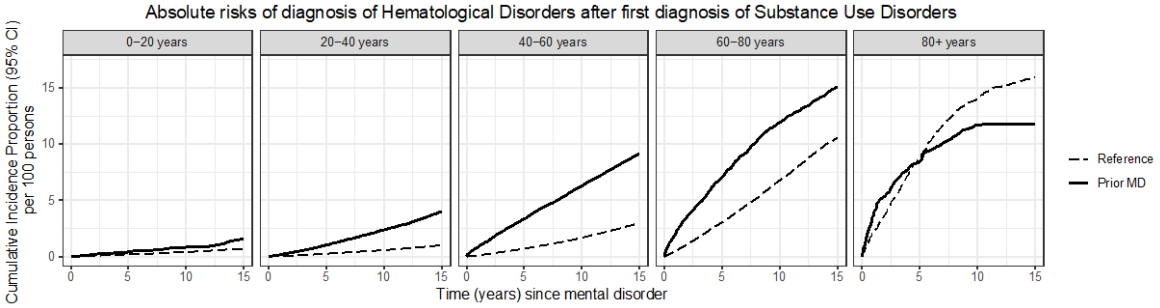


Figure S84.8 – Cancers

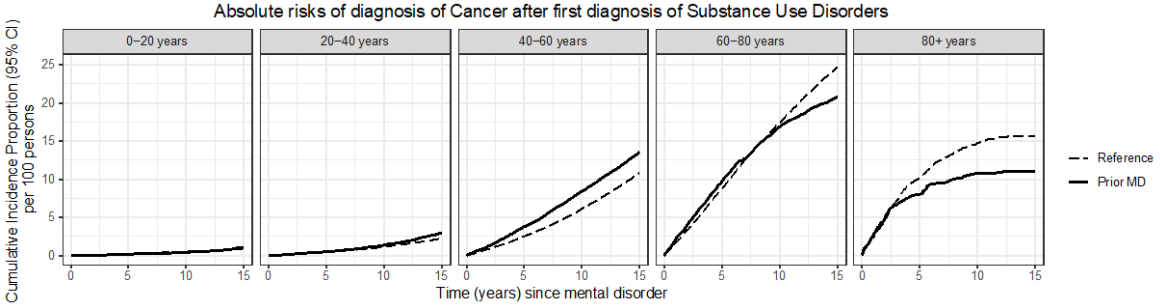
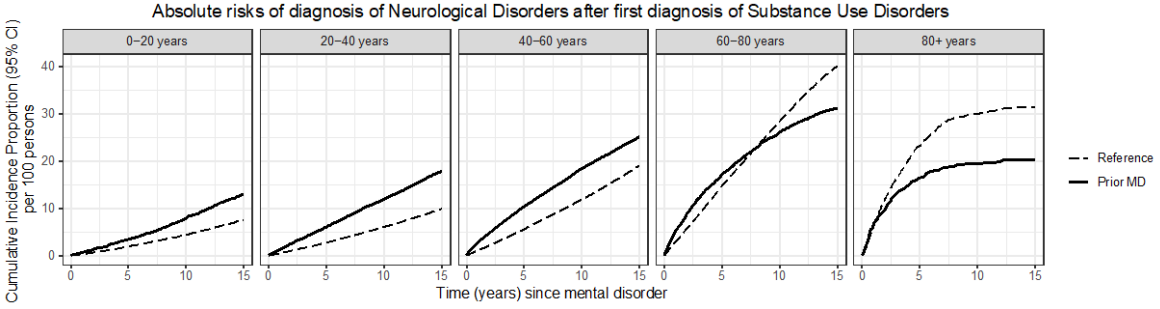


Figure S84.9 – Neurological Conditions



Figures S85.1-S85.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Schizophrenia

Figure S85.1 – Circulatory Conditions

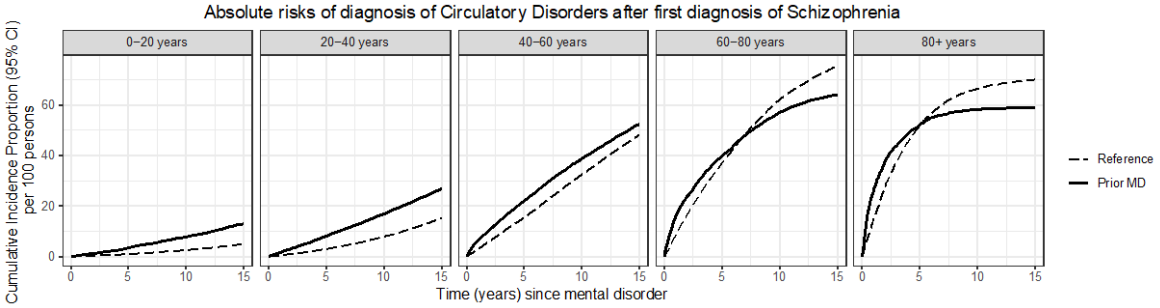


Figure S85.2 – Endocrine Conditions

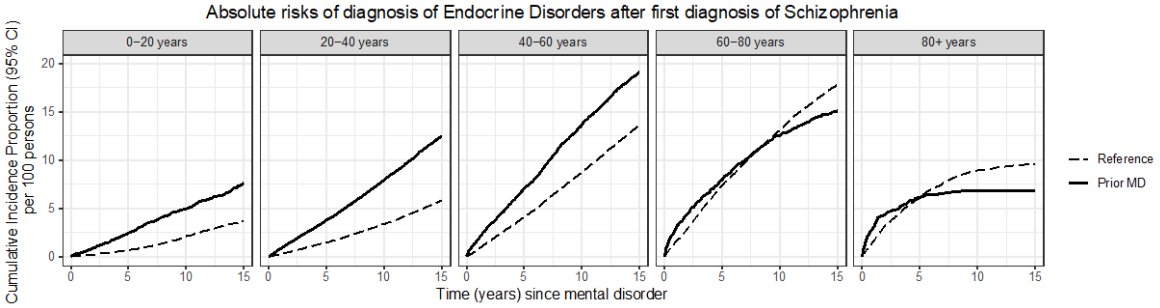


Figure S85.3 – Pulmonary Conditions

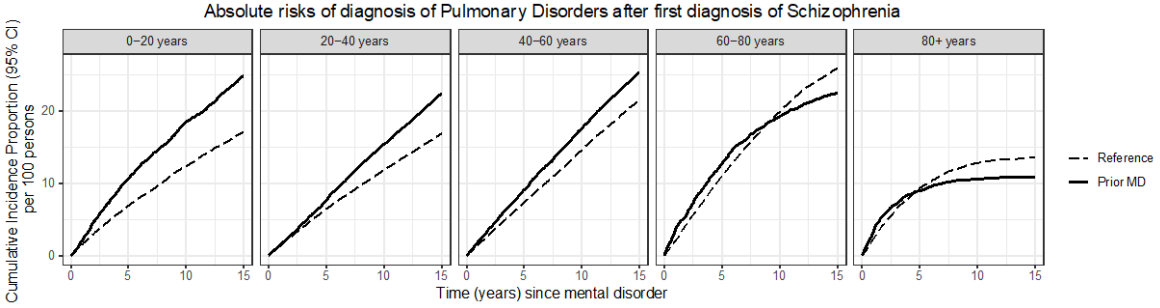


Figure S85.4 – Gastrointestinal Conditions

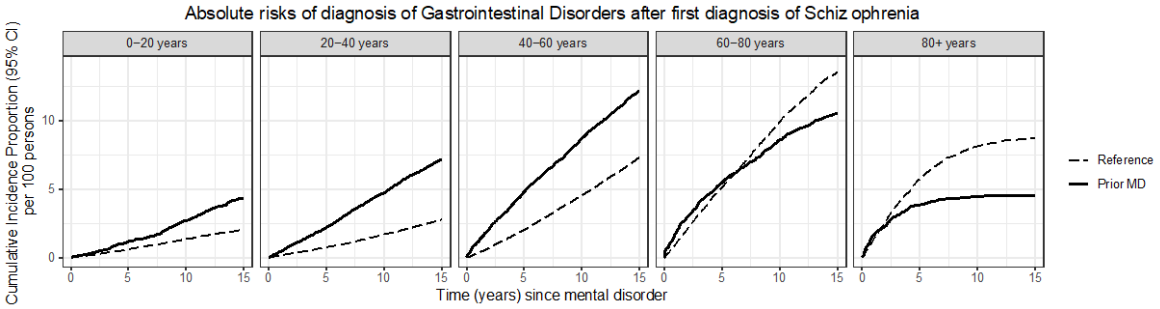


Figure S85.5 – Urogenital Conditions

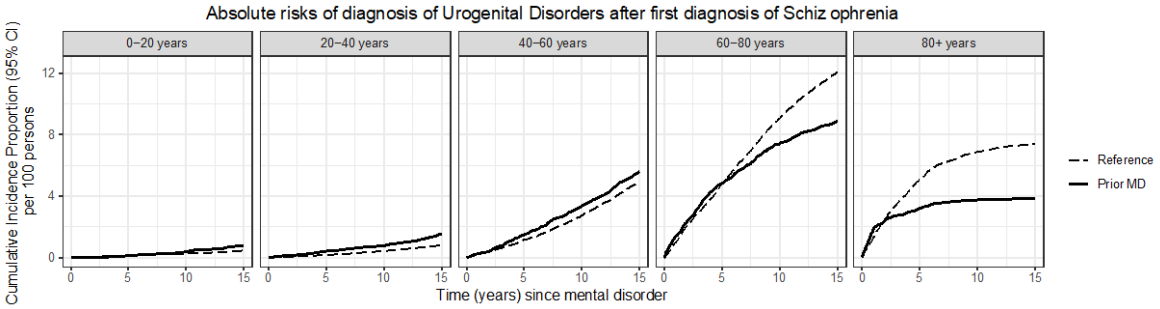


Figure S85.6 – Musculoskeletal Conditions

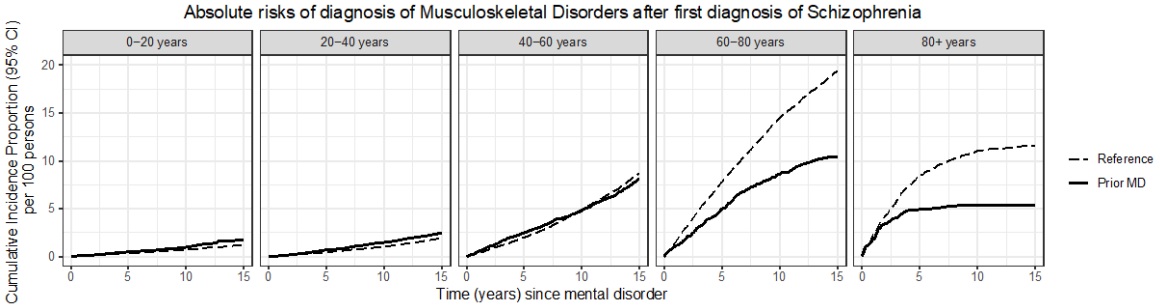


Figure S85.7 – Hematological Conditions

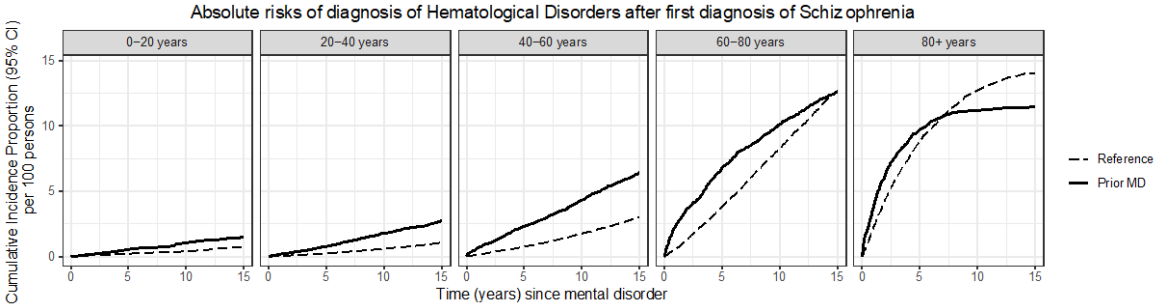


Figure S85.8 – Cancers

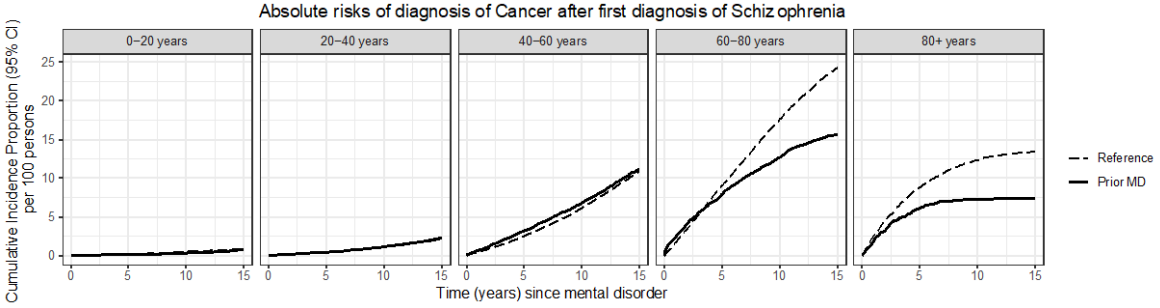
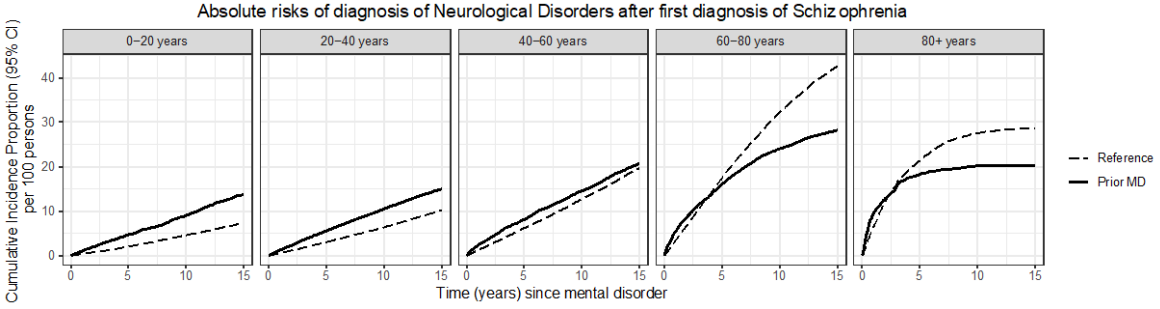


Figure S85.9 – Neurological Conditions



Figures S86.1-S86.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Mood Disorders

Figure S86.1 – Circulatory Conditions

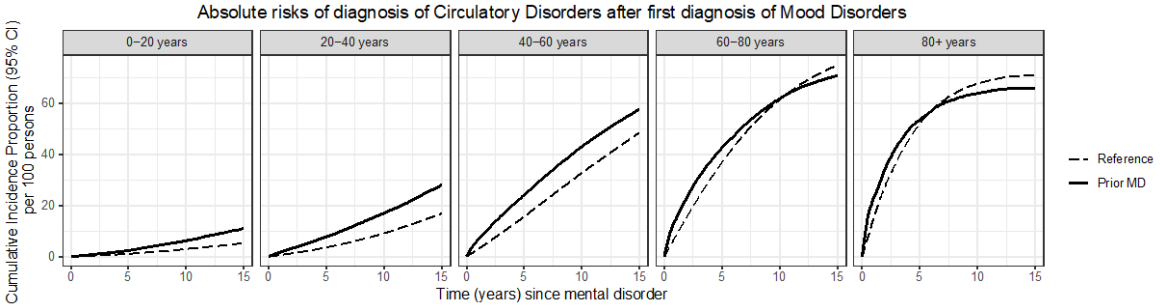


Figure S86.2 – Endocrine Conditions

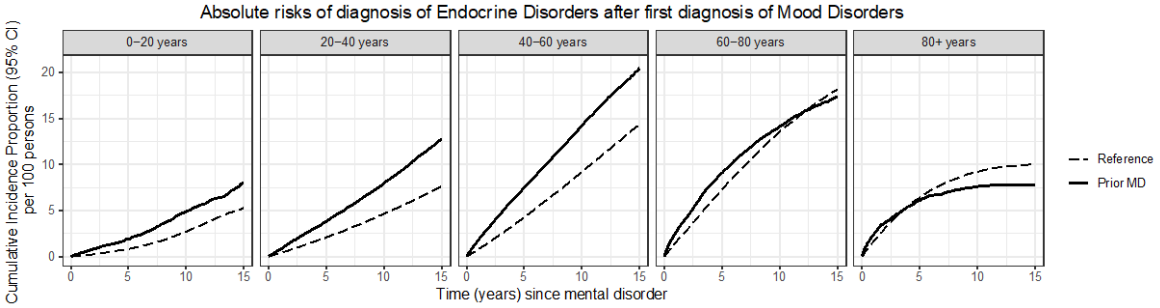


Figure S86.3 – Pulmonary Conditions

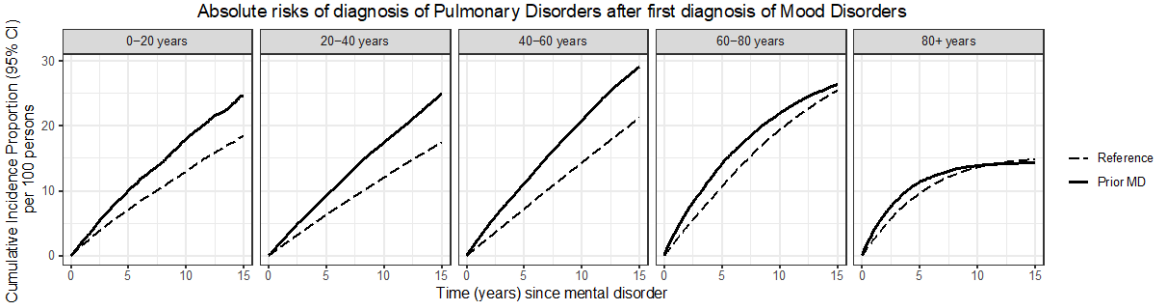


Figure S86.4 – Gastrointestinal Conditions

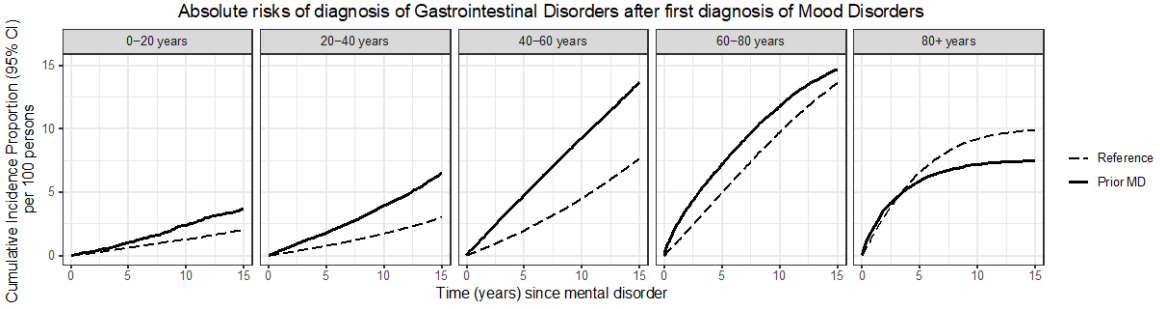


Figure S86.5 – Urogenital Conditions

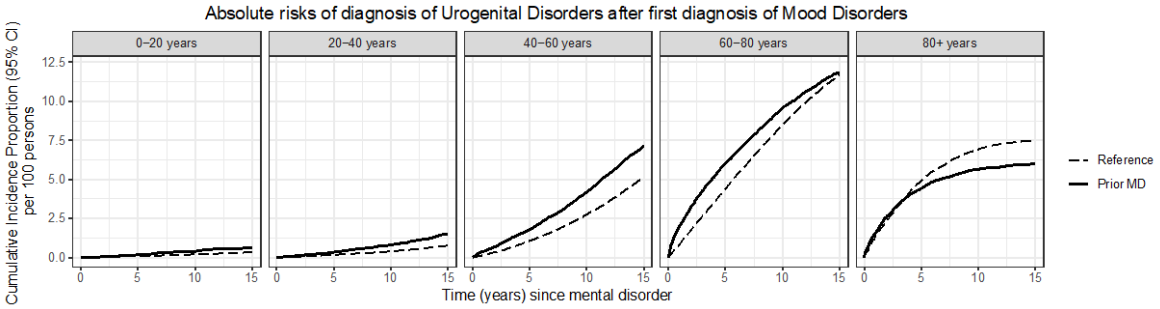


Figure S86.6 – Musculoskeletal Conditions

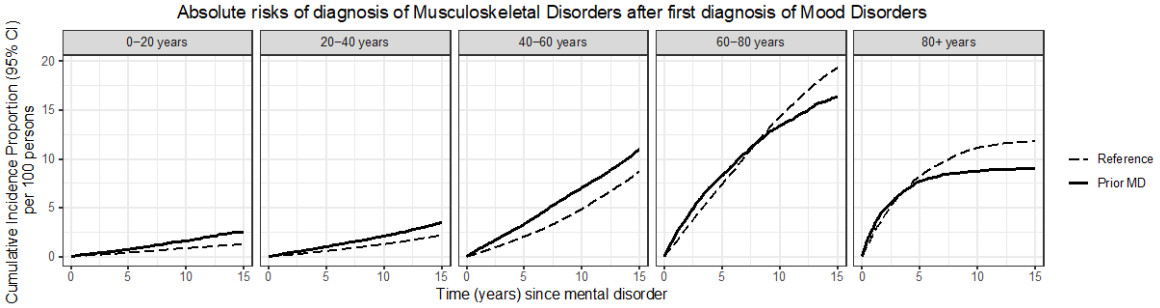


Figure S86.7 – Hematological Conditions

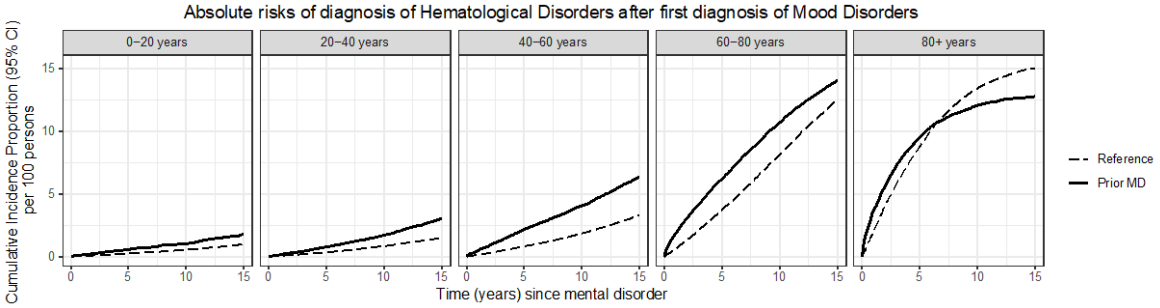


Figure S86.8 – Cancers

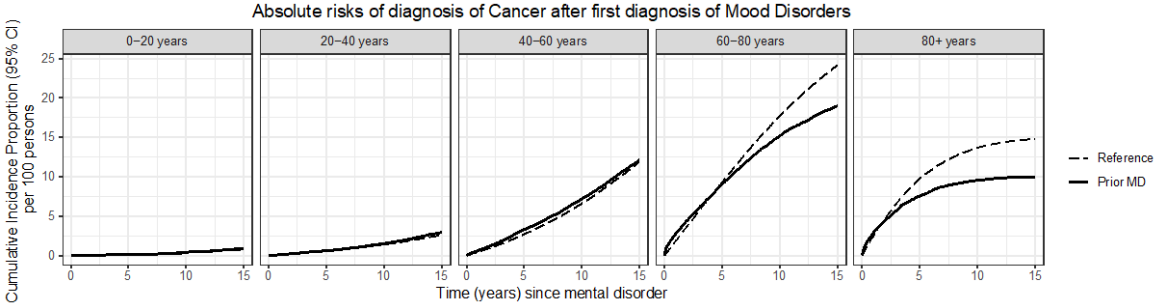
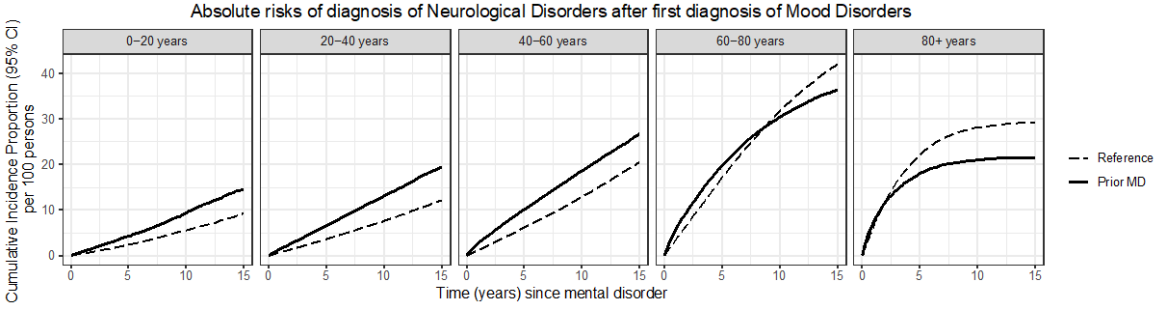


Figure S86.9 – Neurological Conditions



Figures S87.1-S87.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Neurotic Disorders.

Figure S87.1 – Circulatory Conditions

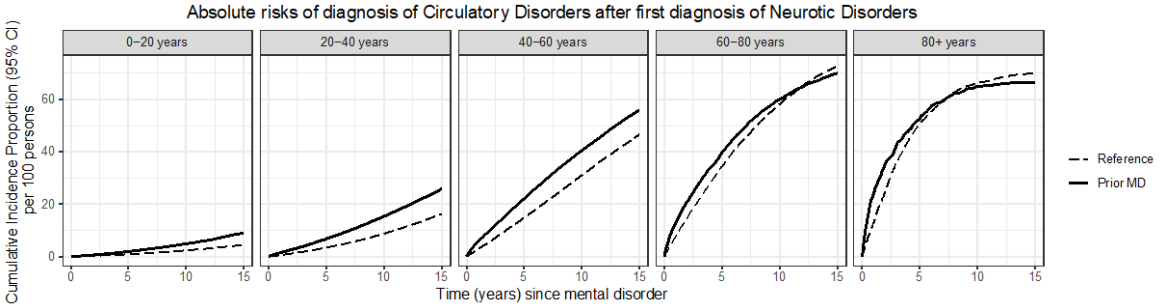


Figure S87.2 – Endocrine Conditions

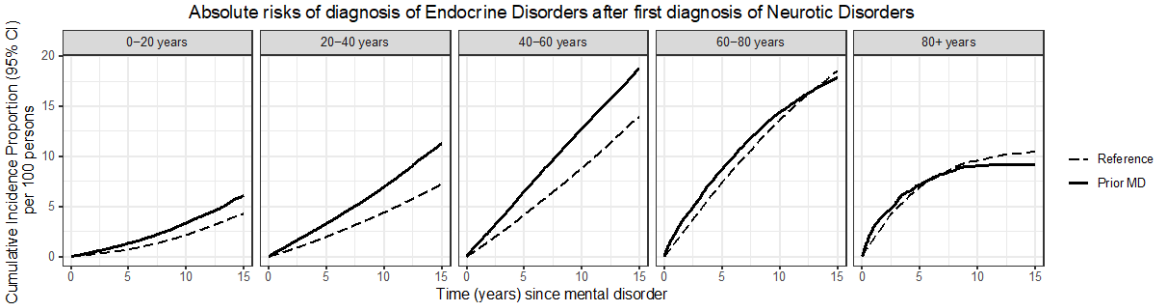


Figure S87.3 – Pulmonary Conditions

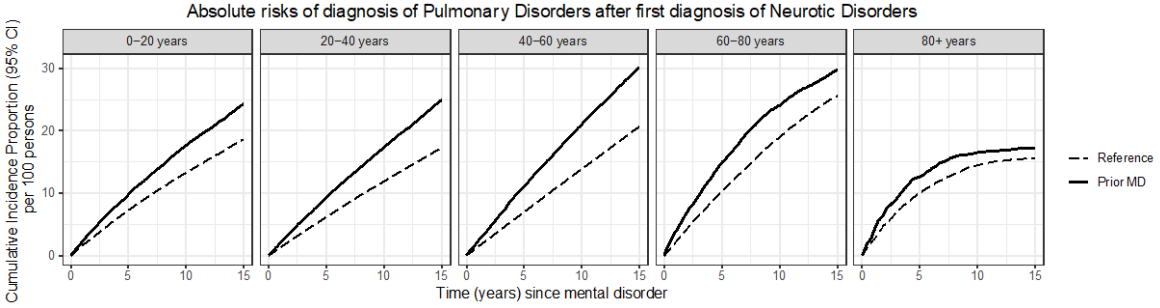


Figure S87.4 – Gastrointestinal Conditions

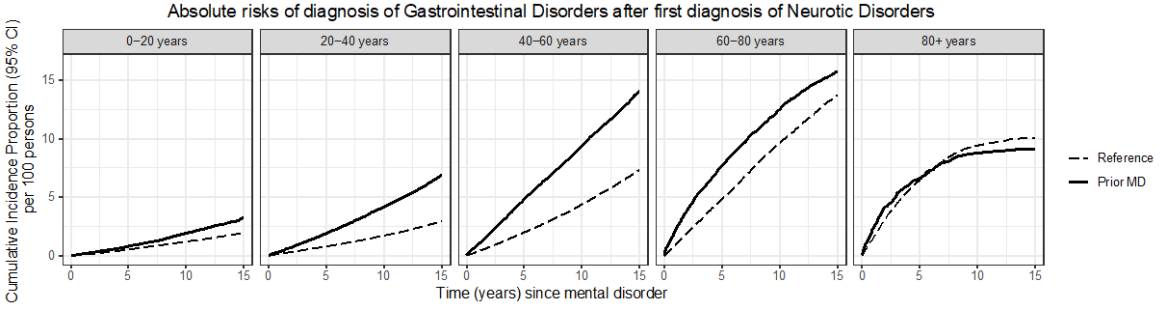


Figure S87.5 – Urogenital Conditions

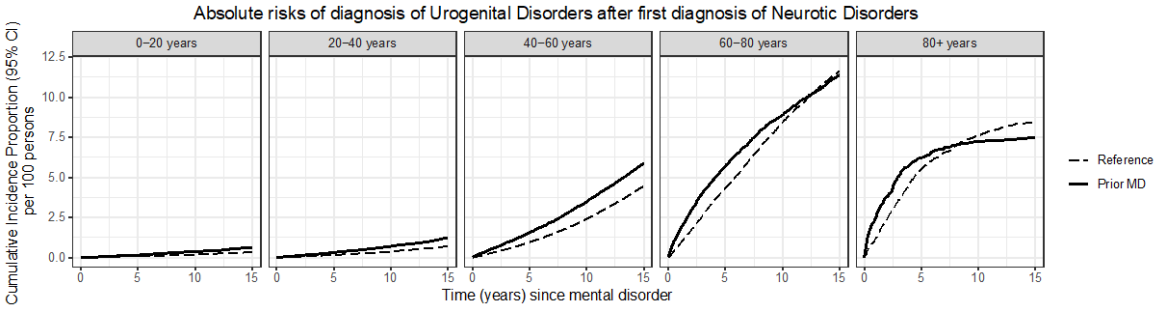


Figure S87.6 – Musculoskeletal Conditions

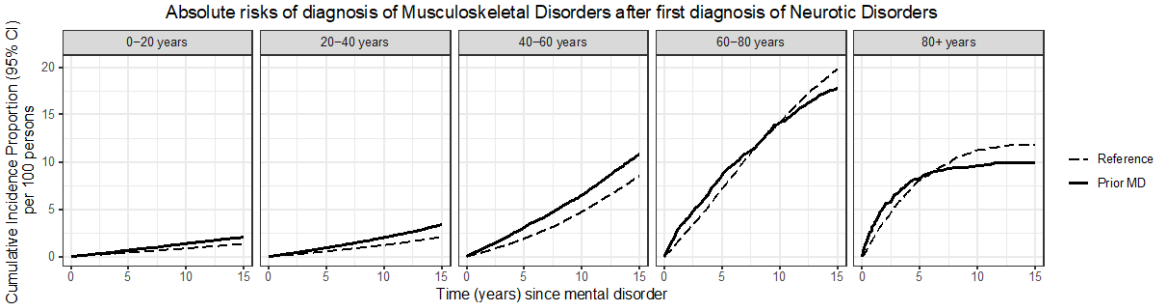


Figure S87.7 – Hematological Conditions

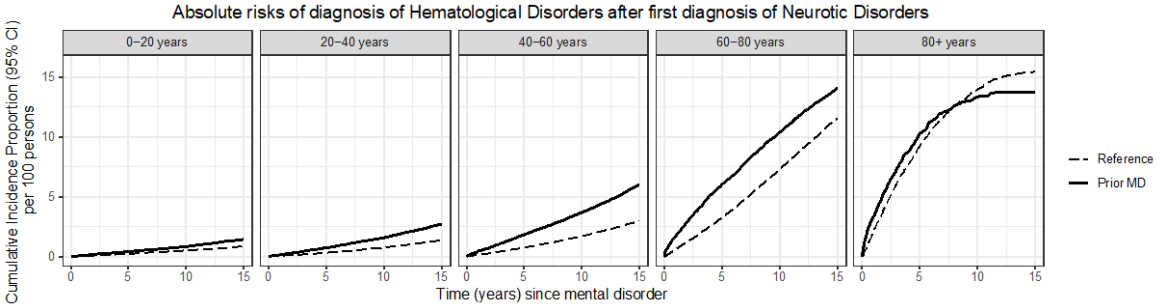


Figure S87.8 – Cancers

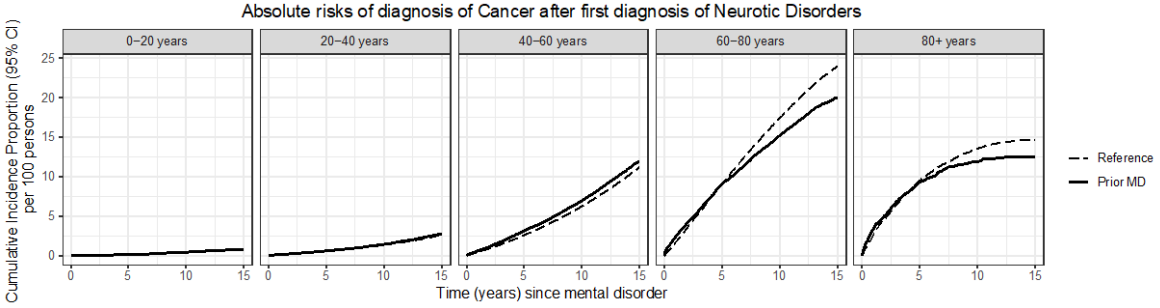
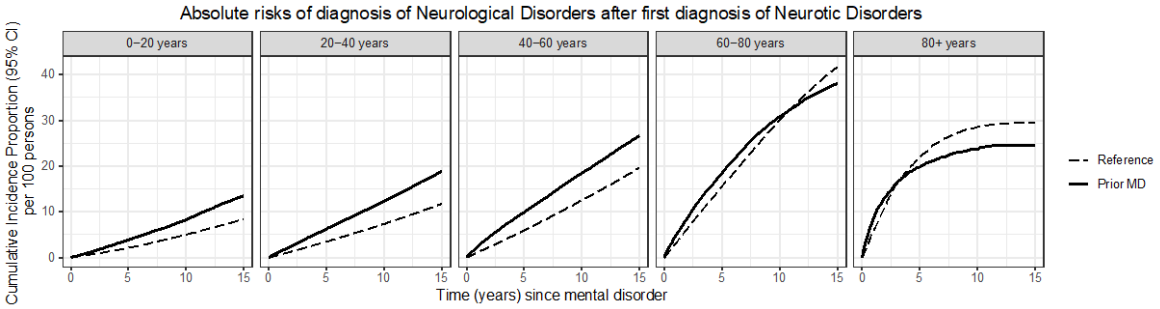


Figure S87.9 – Neurological Conditions



Figures S88.1-S88.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Eating Disorders.

Figure S88.1 – Circulatory Conditions

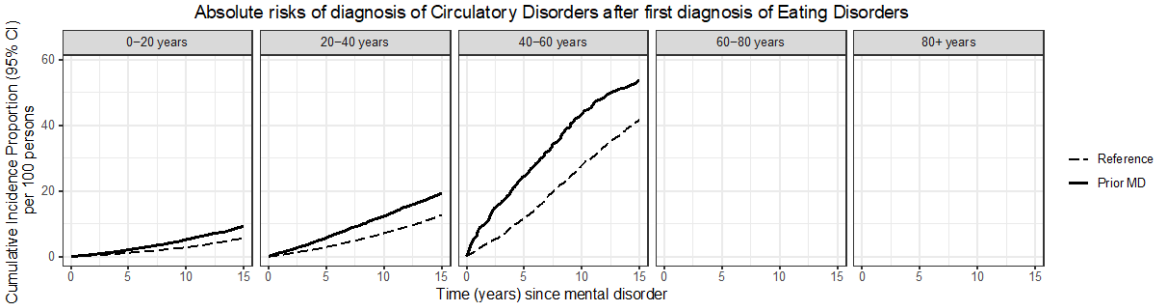


Figure S88.2 – Endocrine Conditions

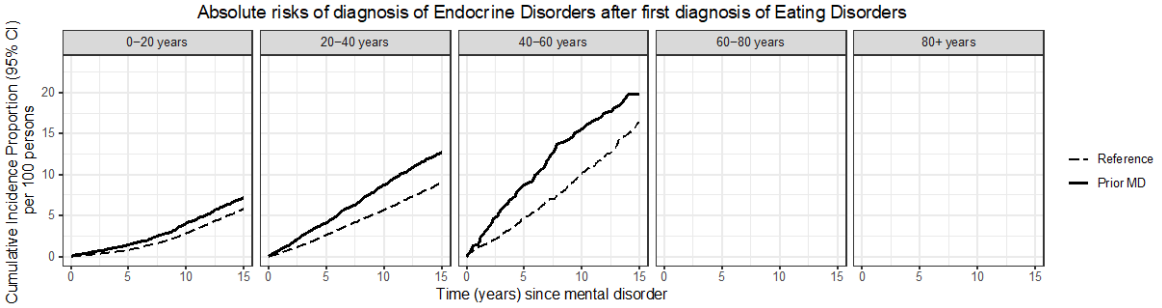


Figure S88.3 – Pulmonary Conditions

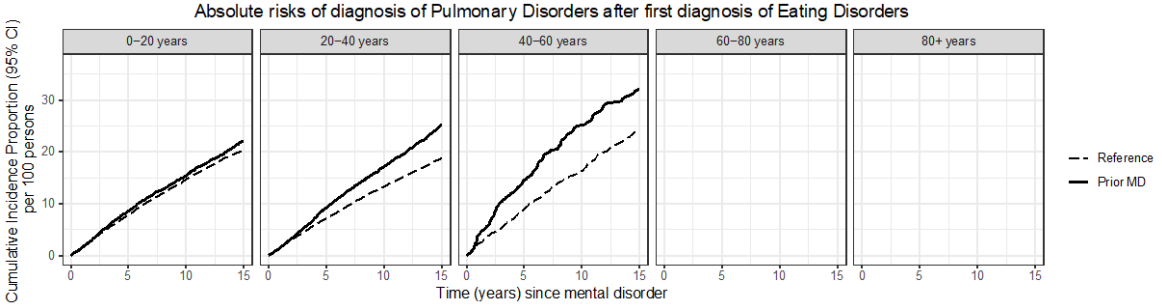


Figure S88.4 – Gastrointestinal Conditions

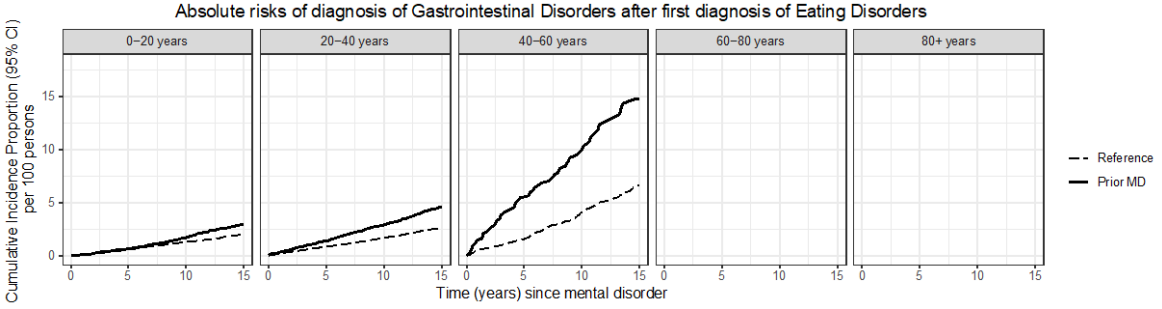


Figure S88.5 – Urogenital Conditions

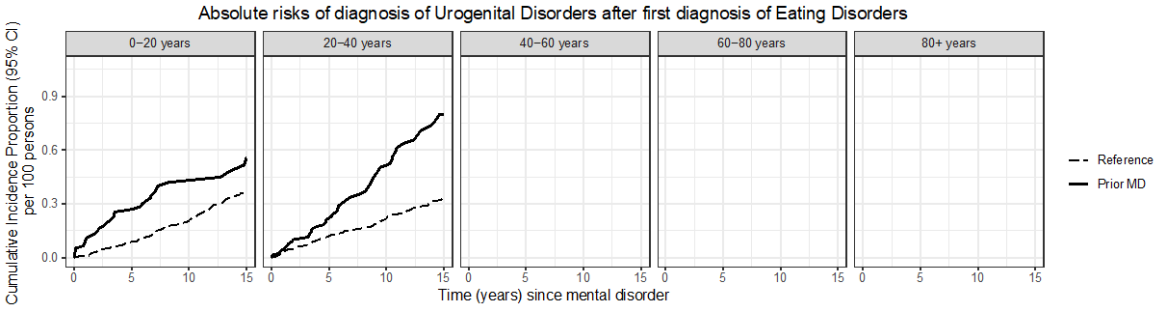


Figure S88.6 – Musculoskeletal Conditions

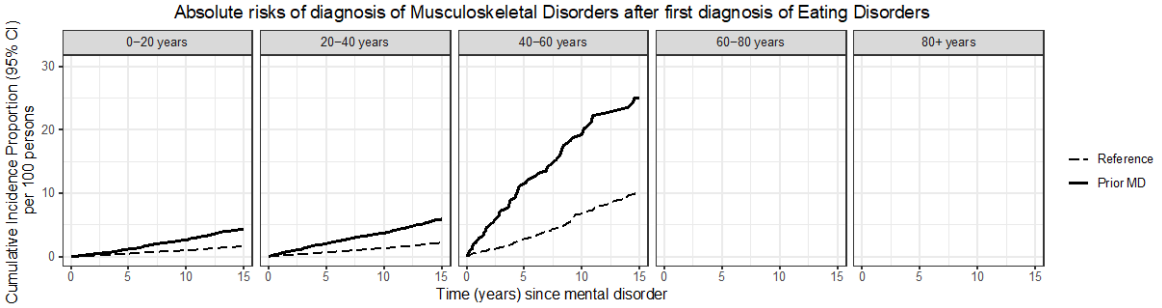


Figure S88.7 – Hematological Conditions

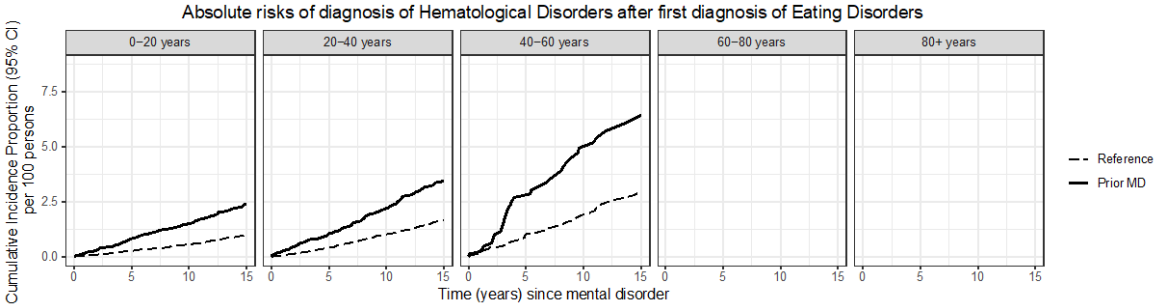


Figure S88.8 – Cancers

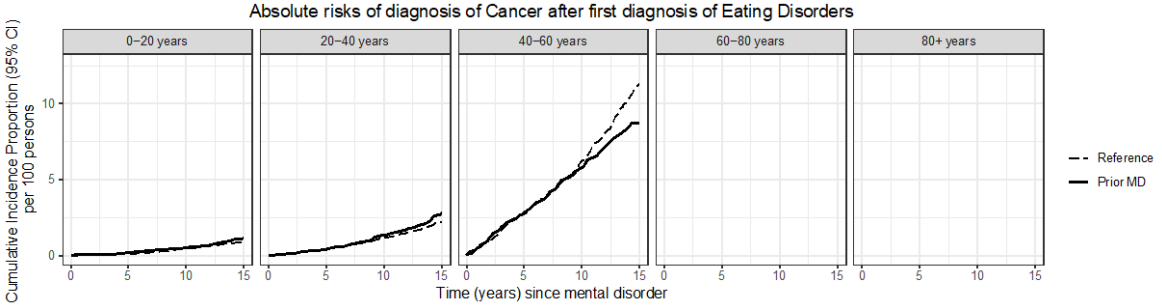
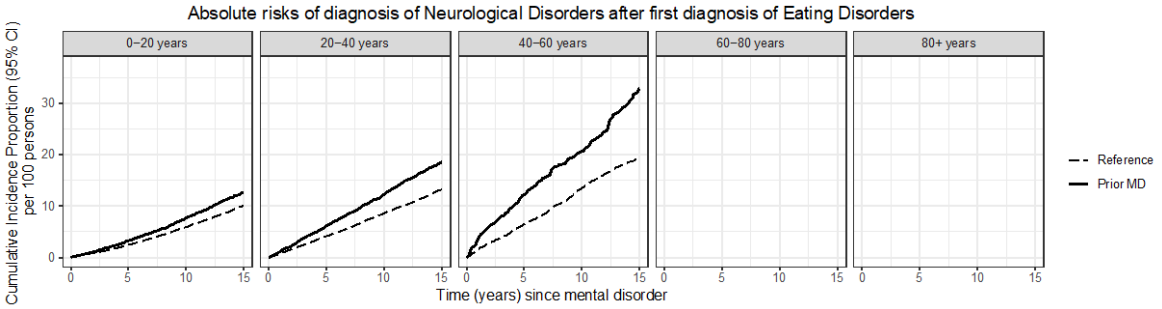


Figure S88.9 – Neurological Conditions



Figures S89.1-S89.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Personality Disorder.

Figure S89.1 – Circulatory Conditions

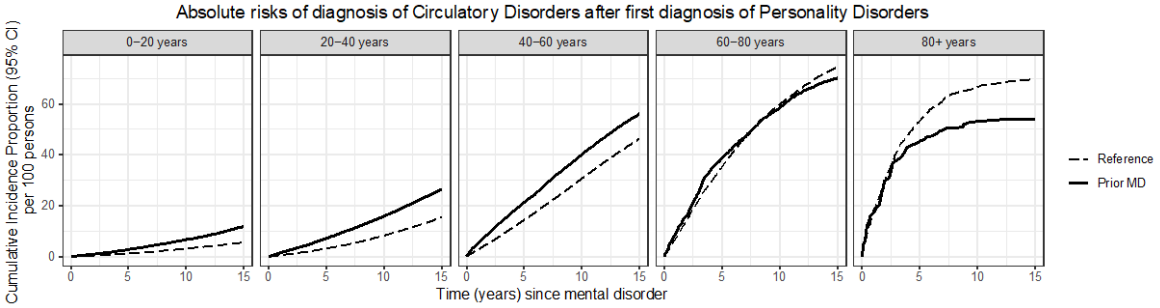


Figure S89.2 – Endocrine Conditions

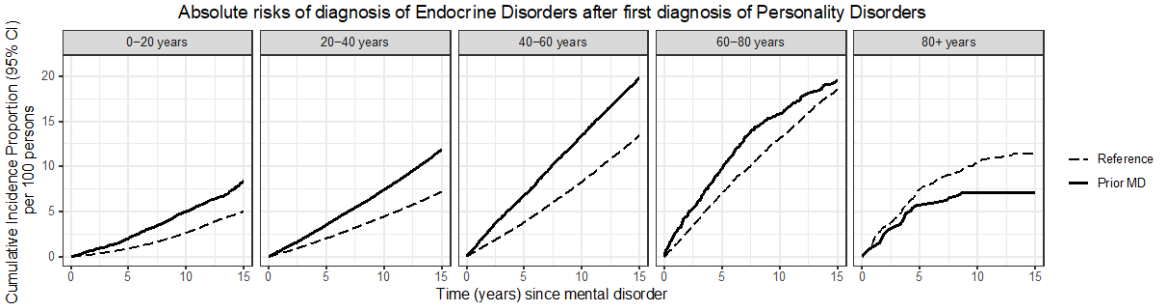


Figure S89.3 – Pulmonary Conditions

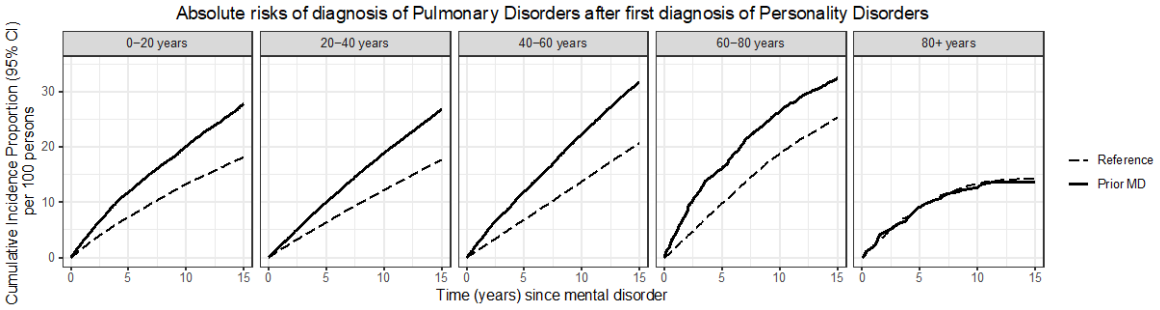


Figure S89.4 – Gastrointestinal Conditions

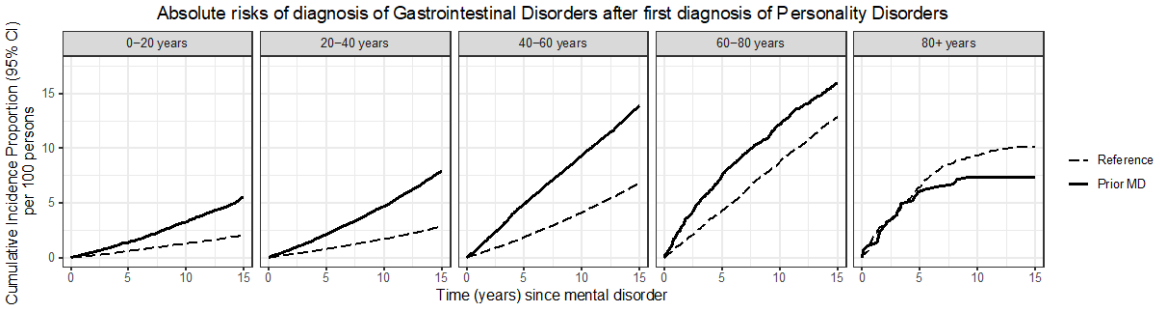


Figure S89.5 – Urogenital Conditions

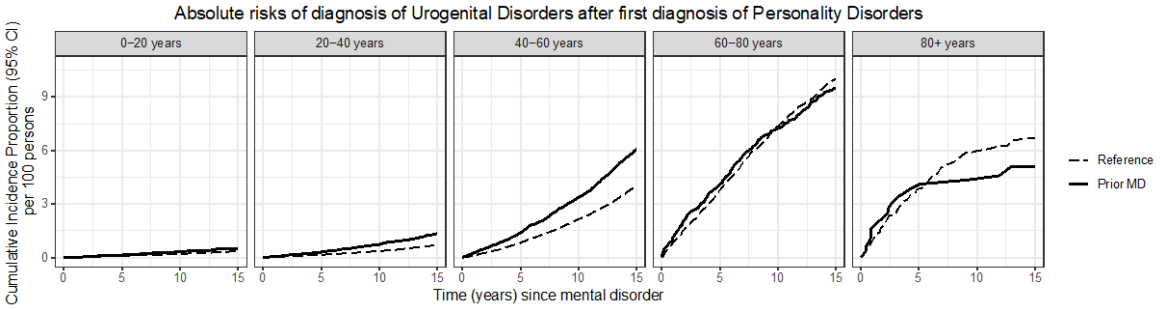


Figure S89.6 – Musculoskeletal Conditions

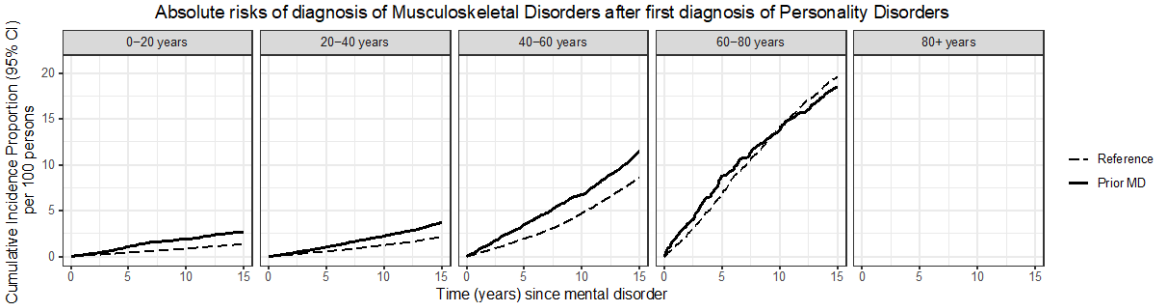


Figure S89.7 – Hematological Conditions

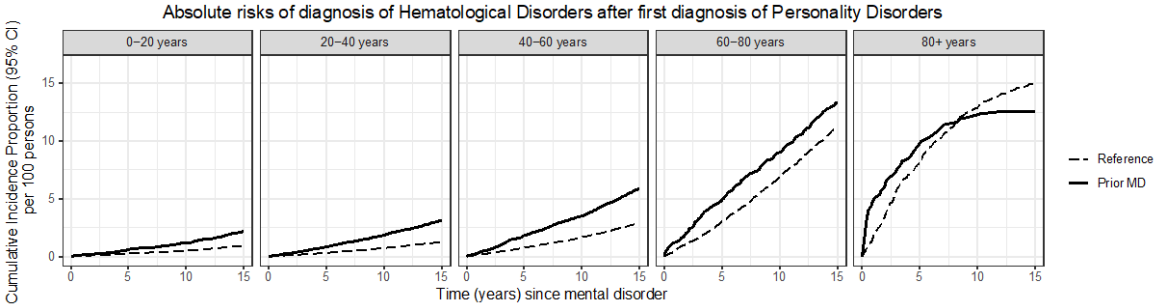


Figure S89.8 – Cancers

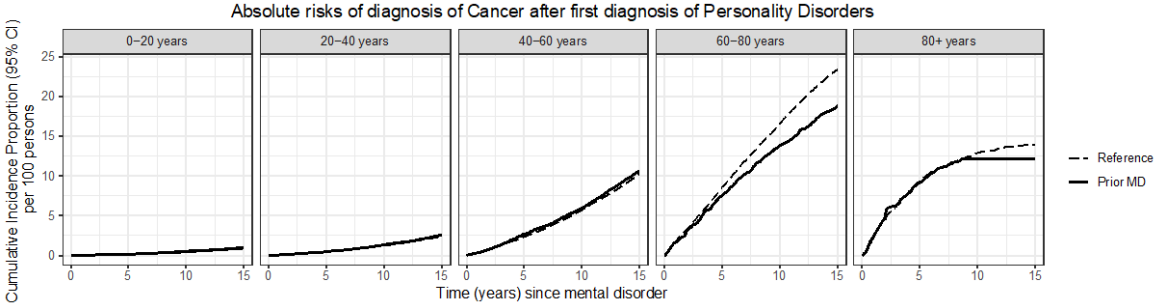
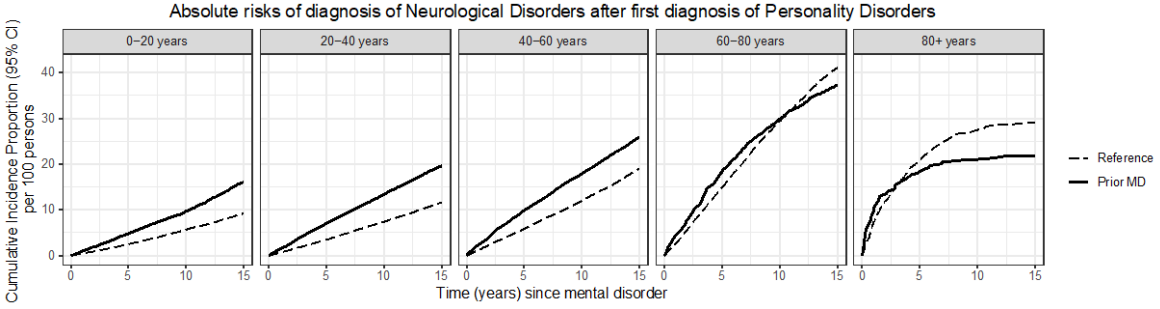


Figure S89.9 – Neurological Conditions



Figures S90.1-S90.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Intellectual Disabilities.

Figure S90.1 – Circulatory Conditions

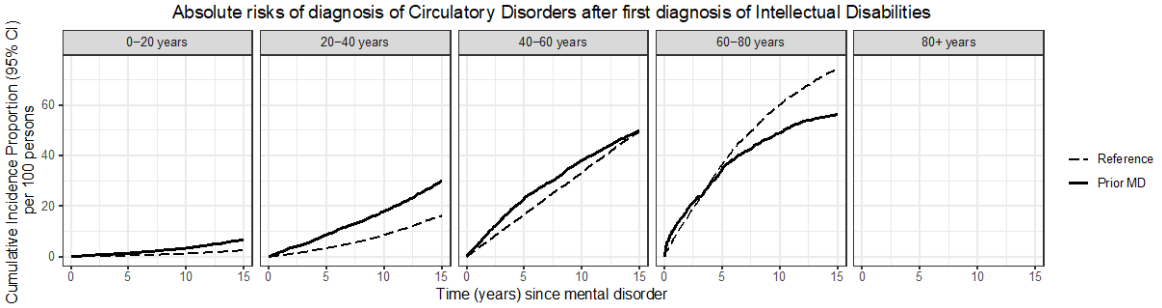


Figure S90.2 – Endocrine Conditions

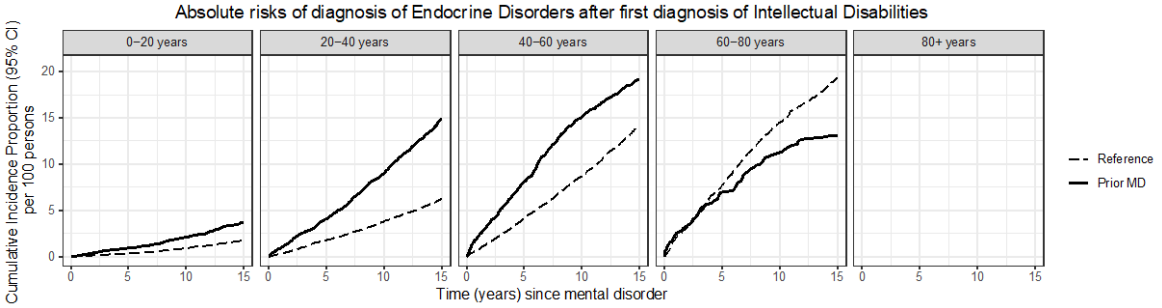


Figure S90.3 – Pulmonary Conditions

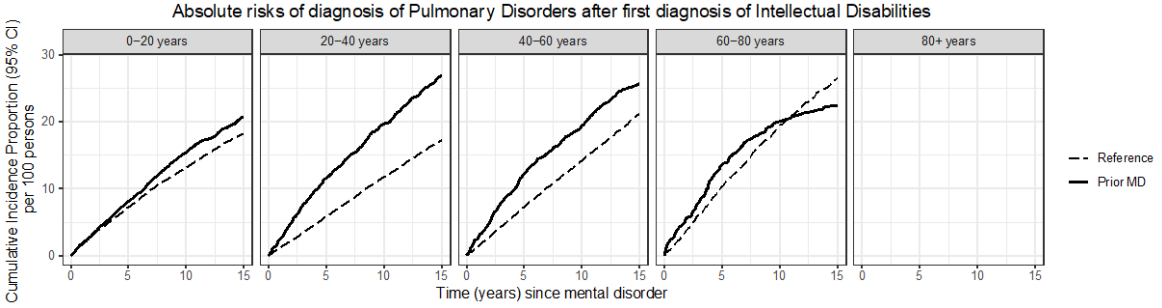


Figure S90.4 – Gastrointestinal Conditions

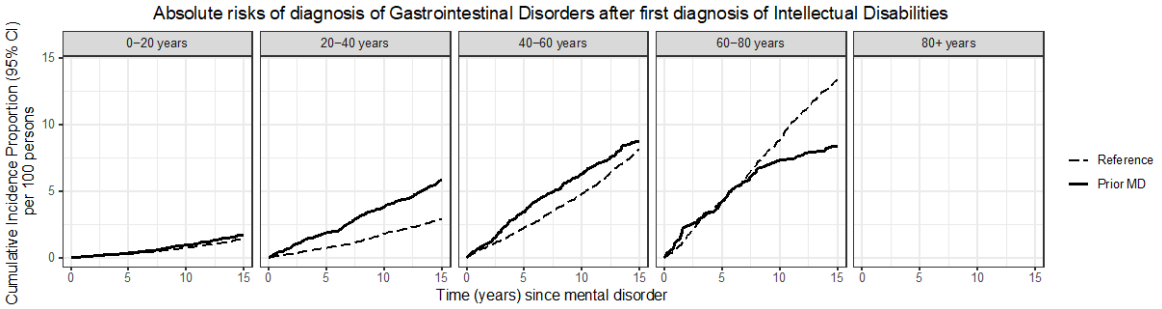


Figure S90.5 – Urogenital Conditions

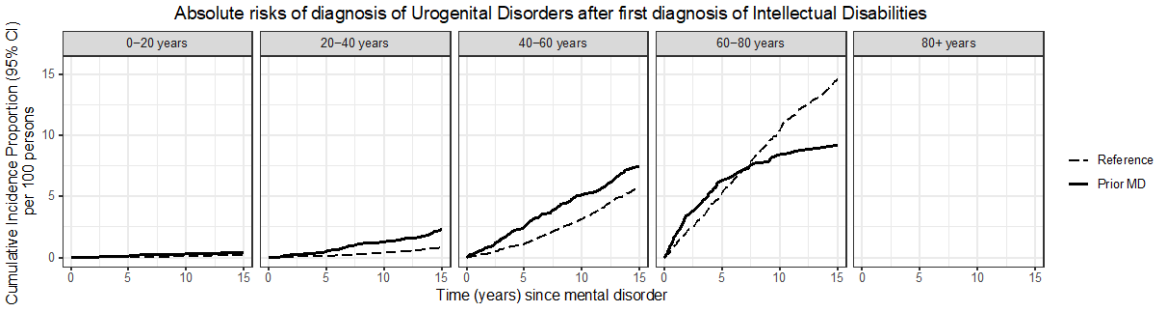


Figure S90.6 – Musculoskeletal Conditions

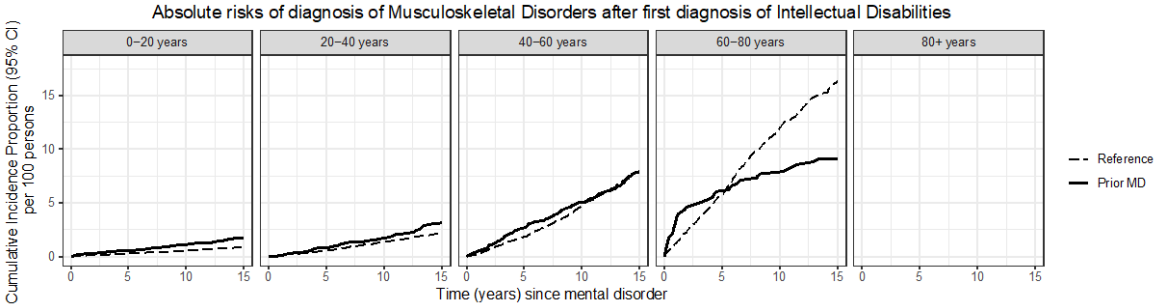


Figure S90.7 – Hematological Conditions

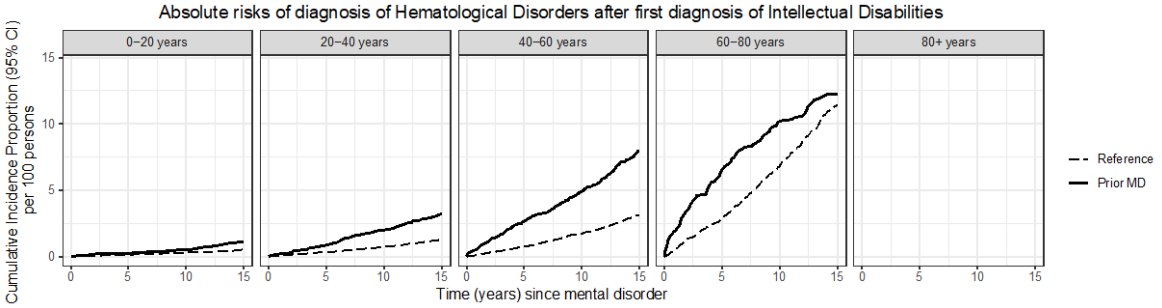


Figure S90.8 – Cancers

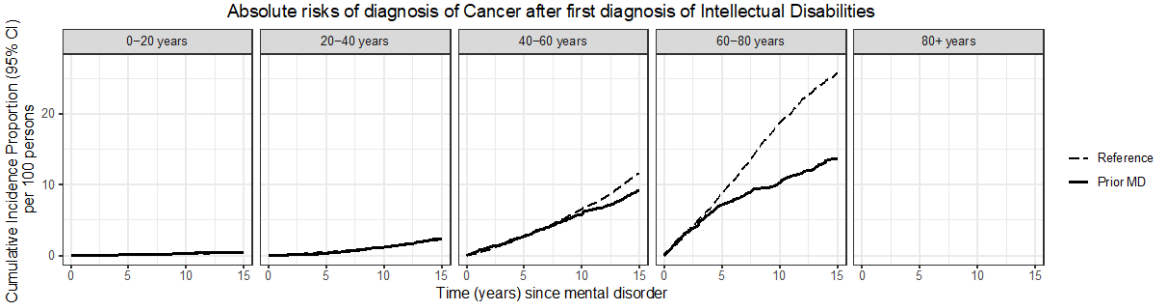
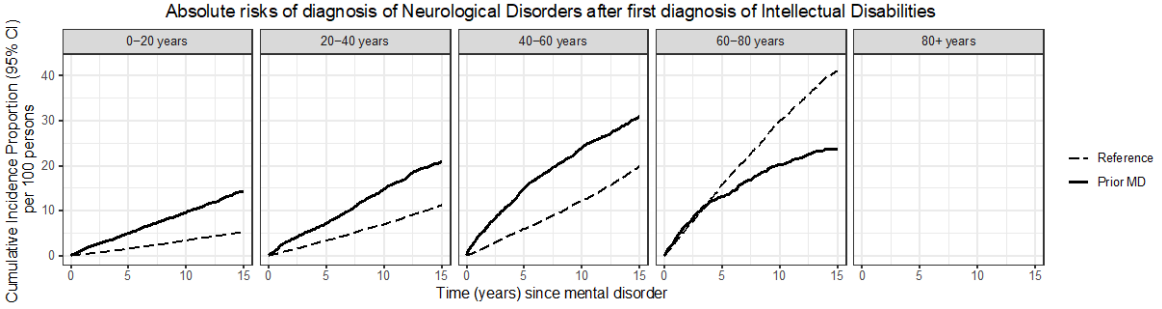


Figure S90.9 – Neurological Conditions



Figures S91.1-S91.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Developmental Disorder.

Figure S91.1 – Circulatory Conditions

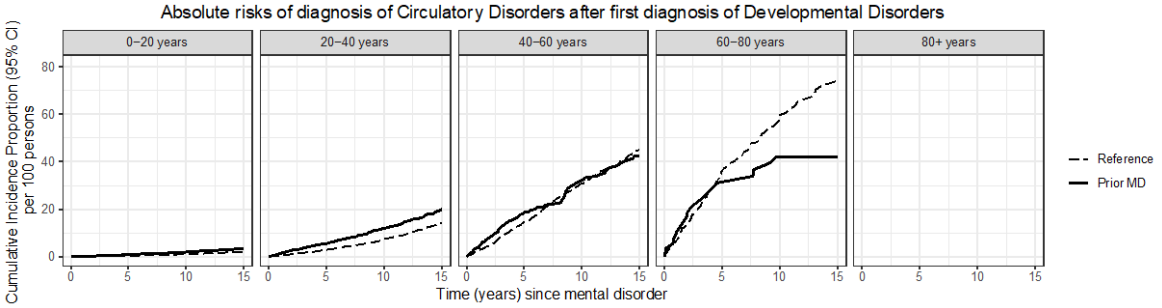


Figure S91.2 – Endocrine Conditions

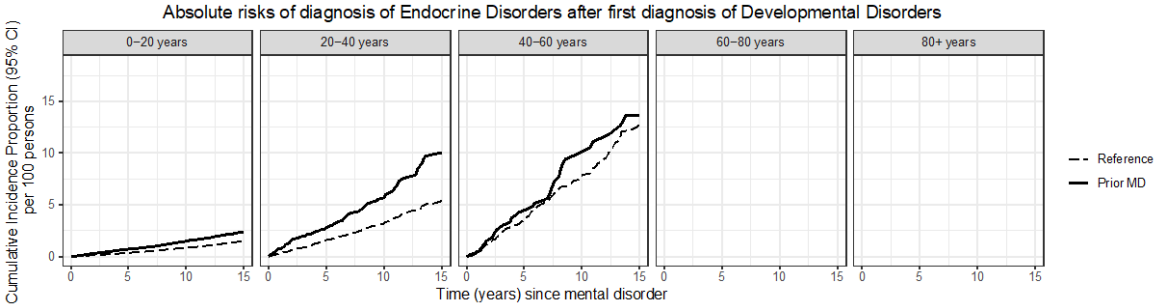


Figure S91.3 – Pulmonary Conditions

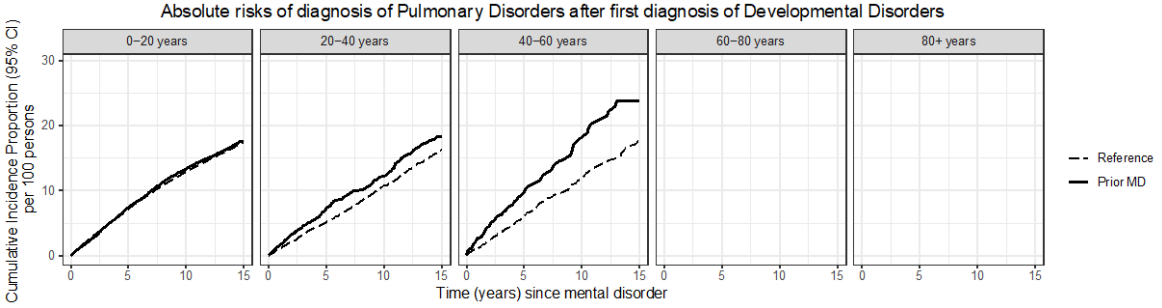


Figure S91.4 – Gastrointestinal Conditions

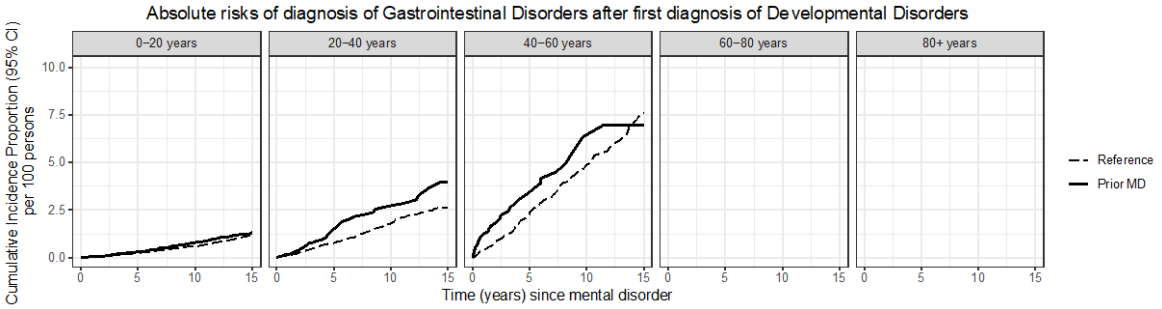


Figure S91.5 – Urogenital Conditions

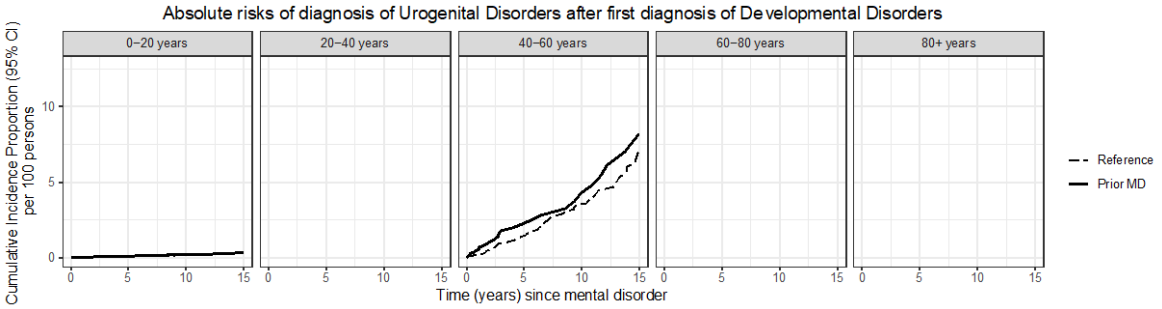


Figure S91.6 – Musculoskeletal Conditions

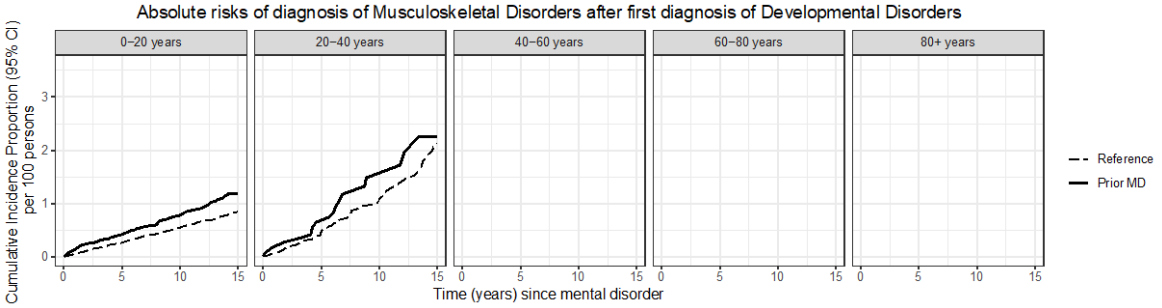


Figure S91.7 – Hematological Conditions

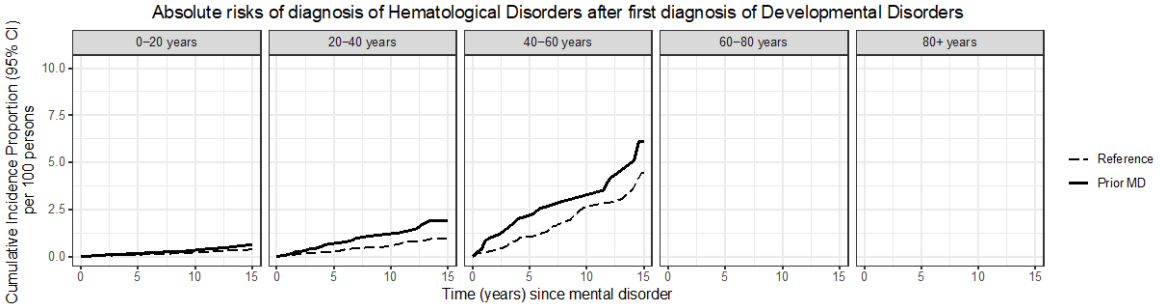


Figure S91.8 – Cancers

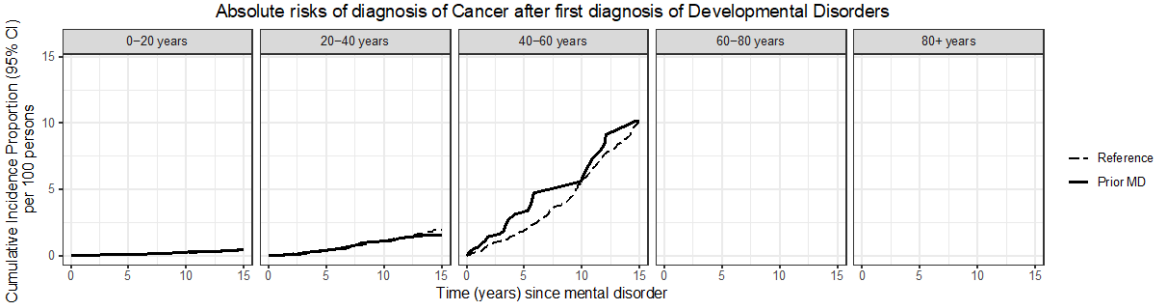
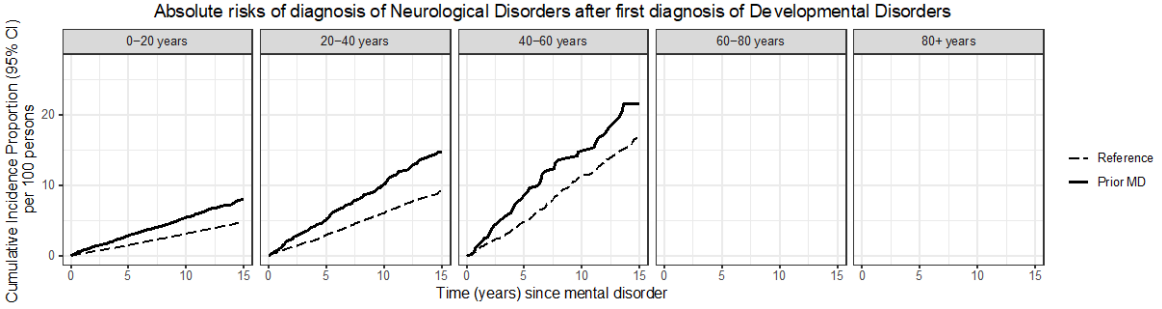


Figure S91.9 – Neurological Conditions



Figures S92.1-S92.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Behavioral Disorder.

Figure S92.1 – Circulatory Conditions

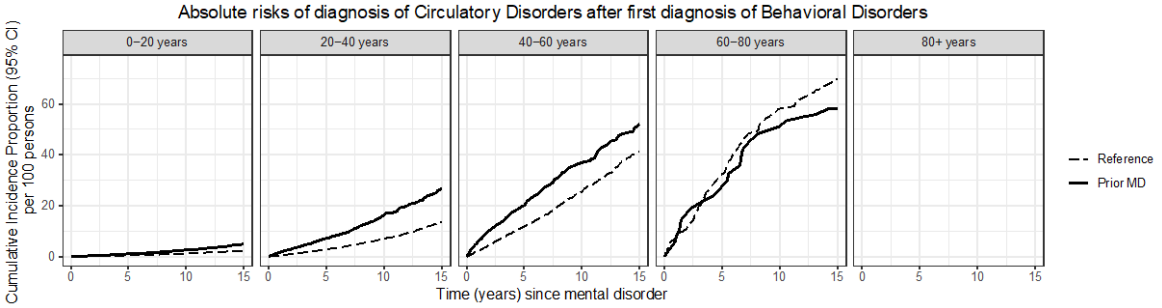


Figure S92.2 – Endocrine Conditions

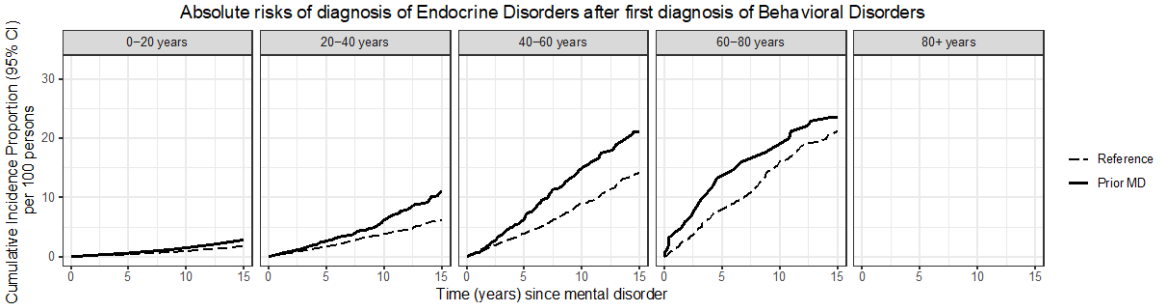


Figure S92.3 – Pulmonary Conditions

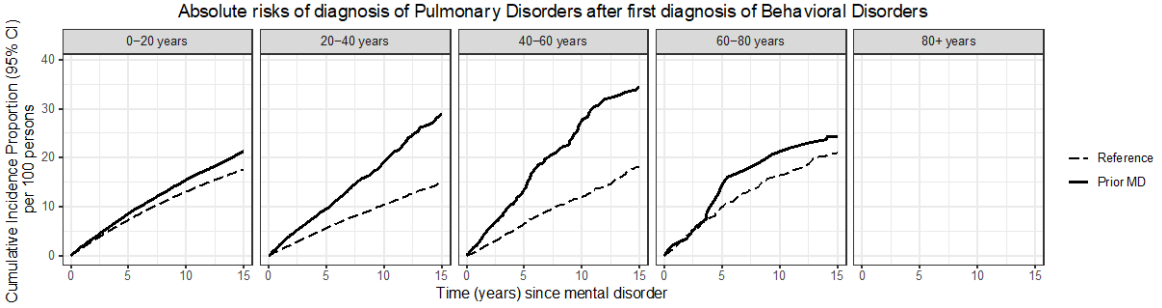


Figure S92.4 – Gastrointestinal Conditions

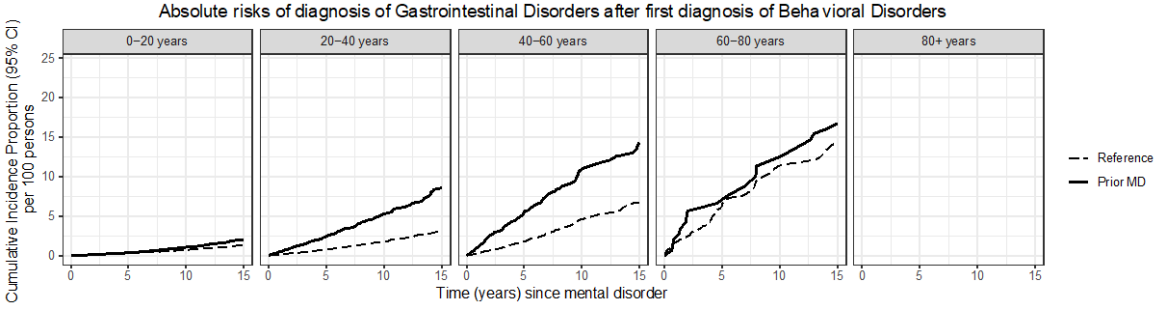


Figure S92.5 – Urogenital Conditions

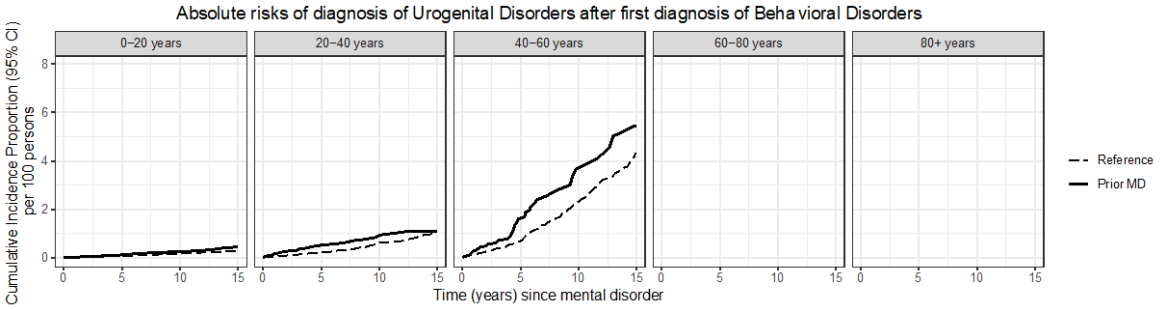


Figure S92.6 – Musculoskeletal Conditions

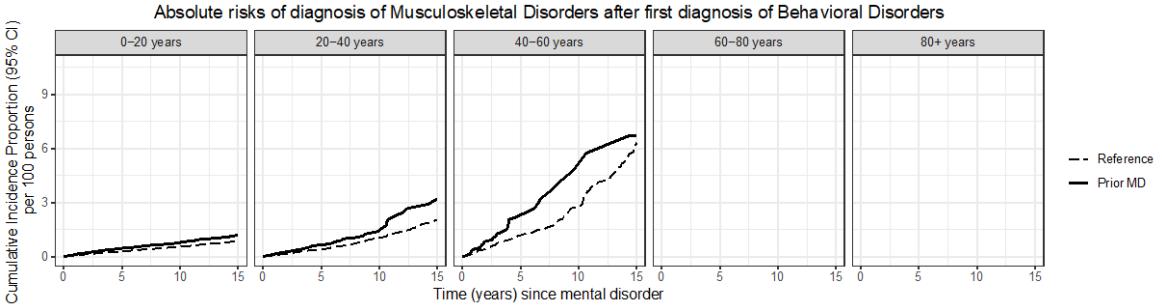


Figure S92.7 – Hematological Conditions

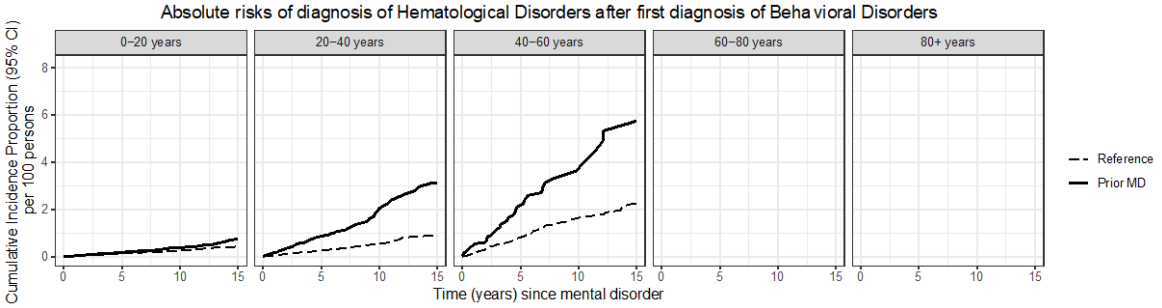


Figure S92.8 – Cancers

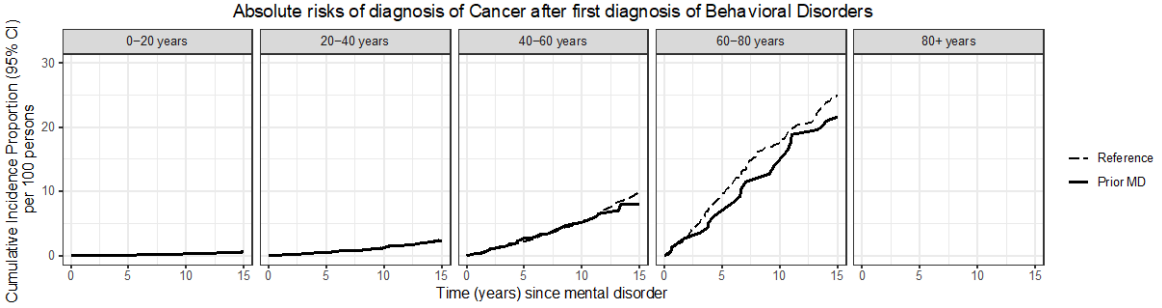
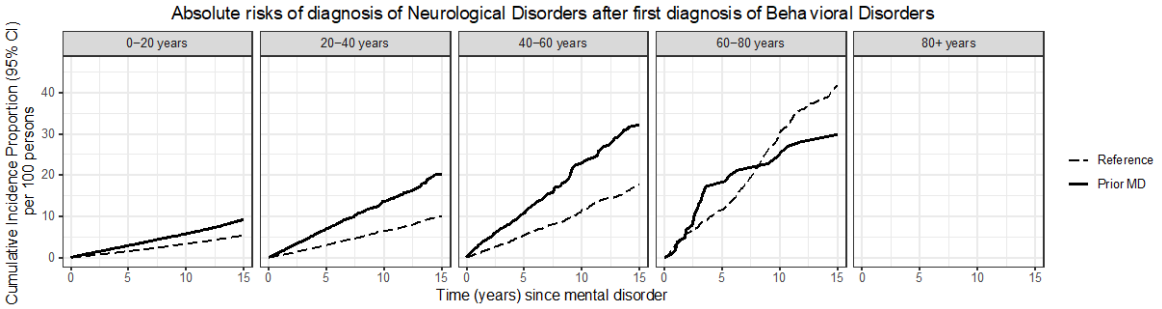


Figure S92.9 – Neurological Conditions



Figures S93.1-S93.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Organic Disorders

Figure S93.1 – Circulatory Conditions

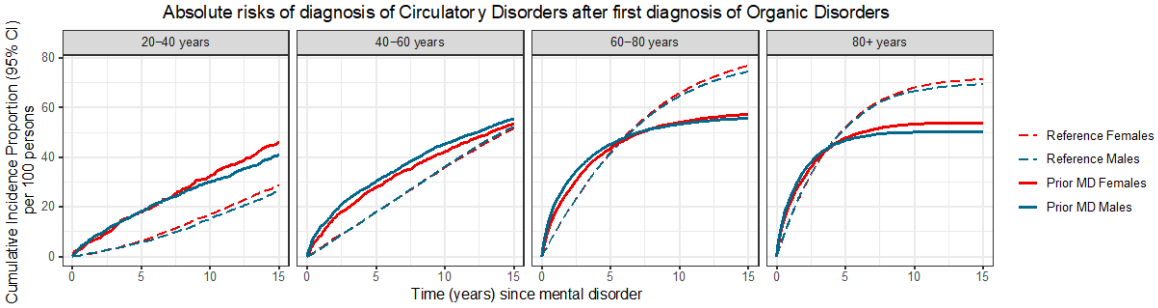


Figure S93.2 – Endocrine Conditions

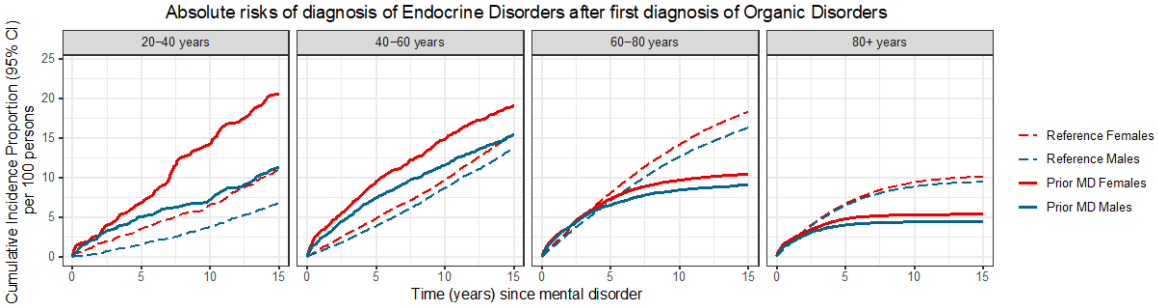


Figure S93.3 – Pulmonary Conditions

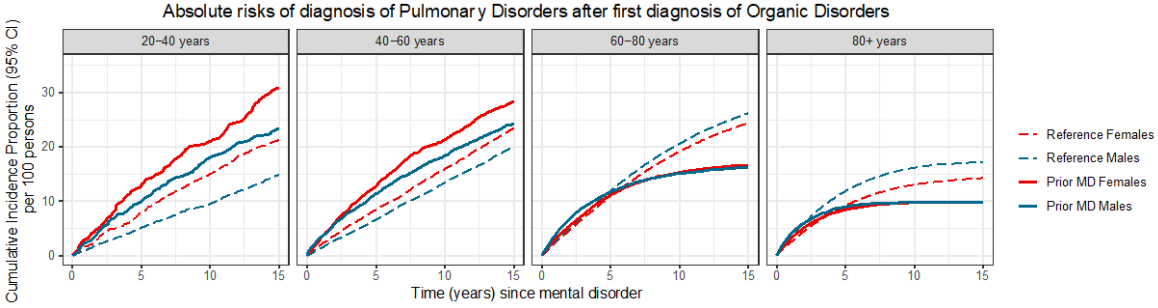


Figure S93.4 – Gastrointestinal Conditions

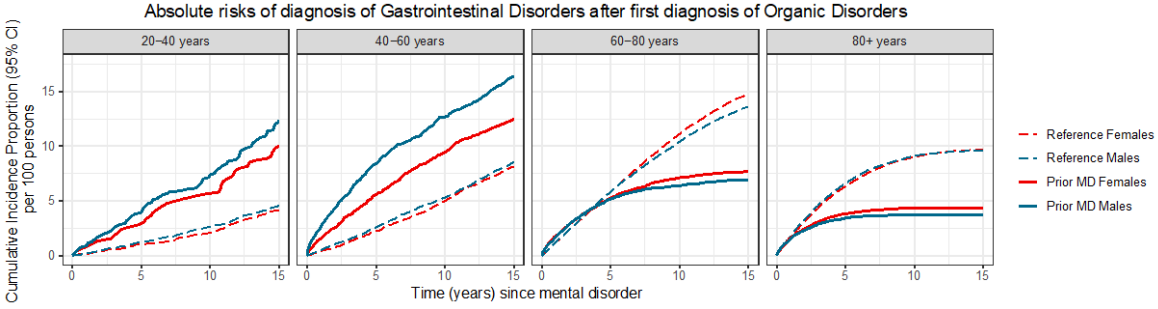


Figure S93.5 – Urogenital Conditions

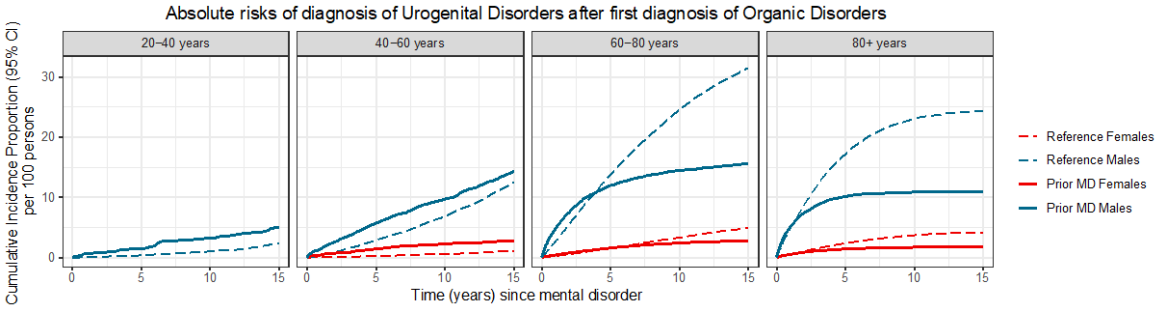


Figure S93.6 – Musculoskeletal Conditions

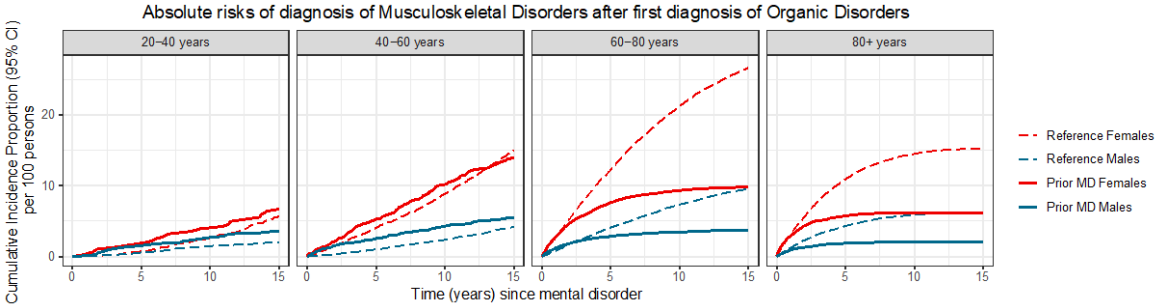


Figure S93.7 – Hematological Conditions

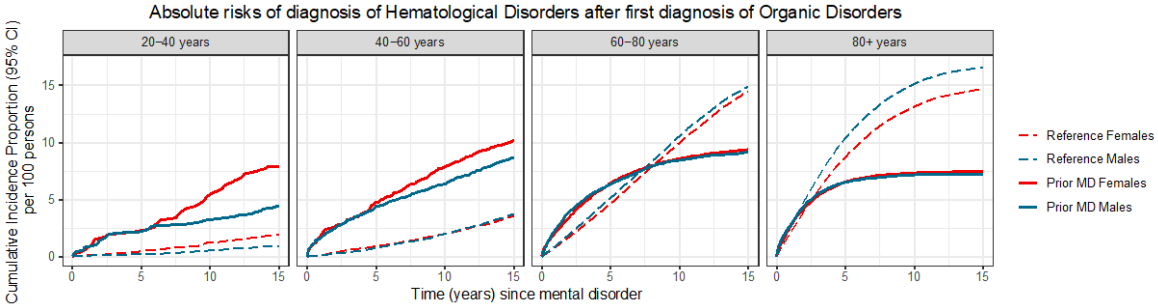


Figure S93.8 – Cancers

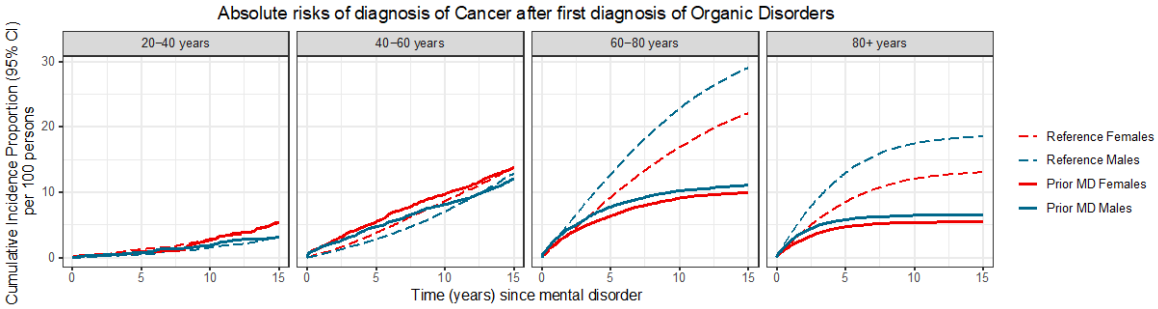
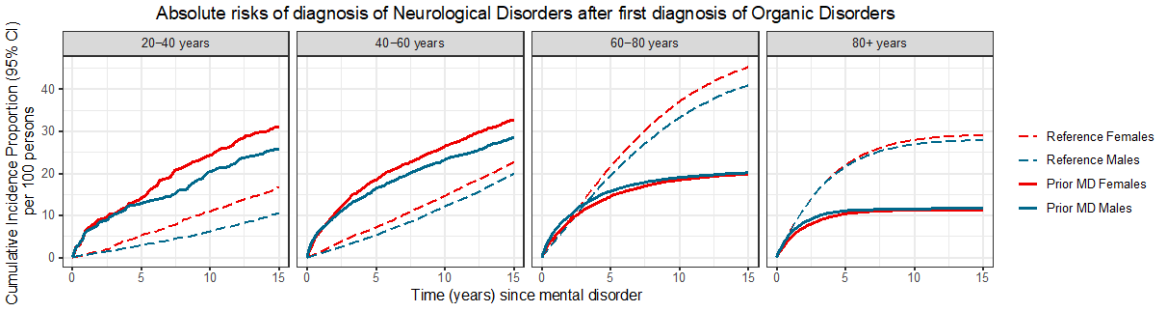


Figure S93.9 – Neurological Conditions



Figures S94.1-S94.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Substance Use Disorders

Figure S94.1 – Circulatory Conditions

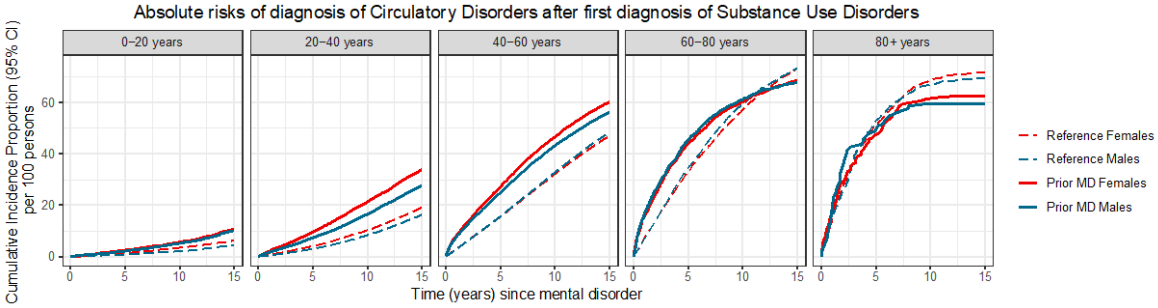


Figure S94.2 – Endocrine Conditions

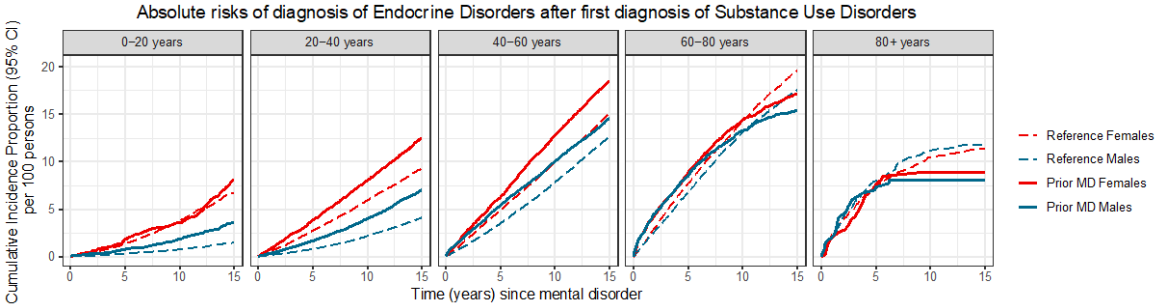


Figure S94.3 – Pulmonary Conditions

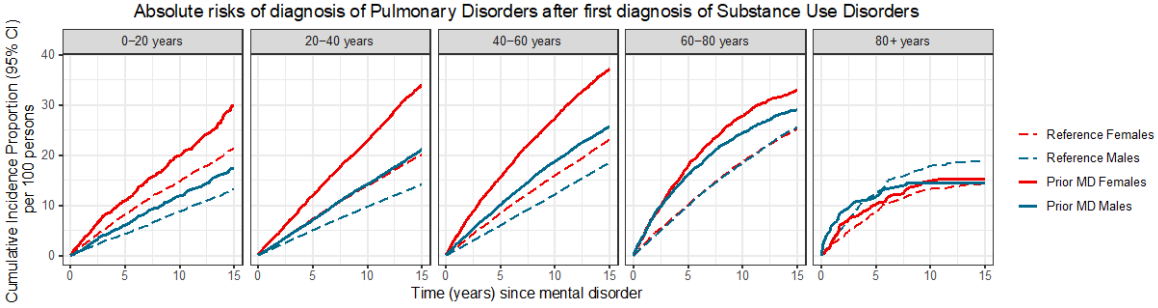


Figure S94.4 – Gastrointestinal Conditions

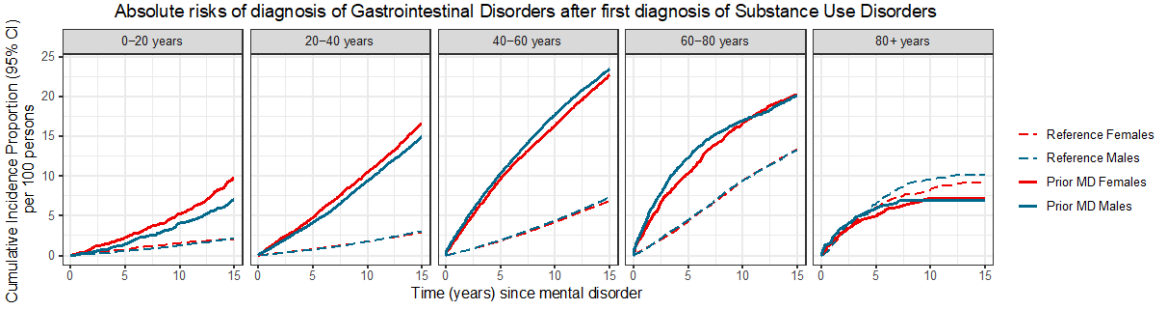


Figure S94.5 – Urogenital Conditions

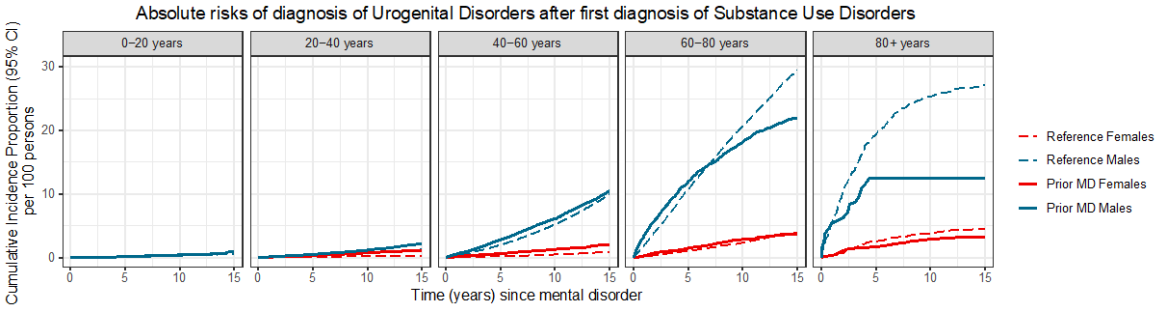


Figure S94.6 – Musculoskeletal Conditions

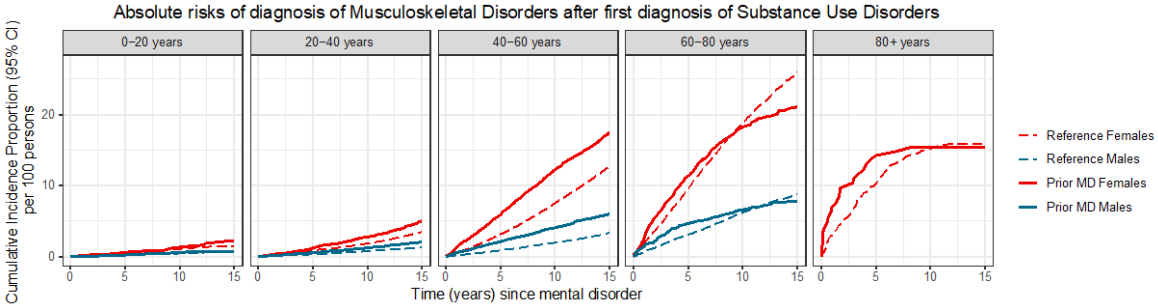


Figure S94.7 – Hematological Conditions

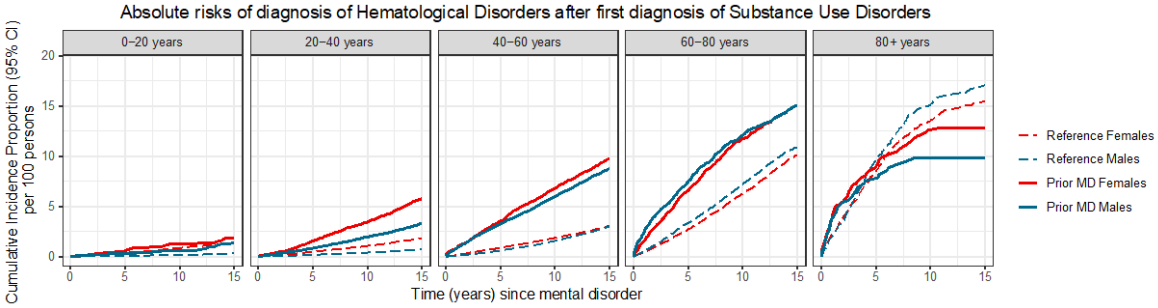


Figure S94.8 – Cancers

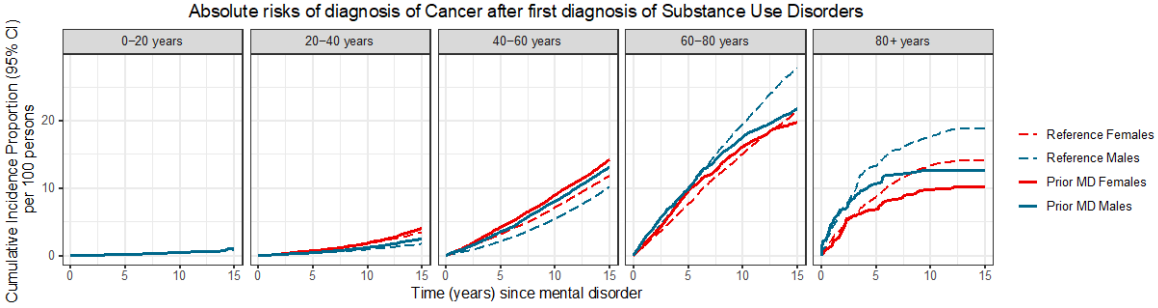
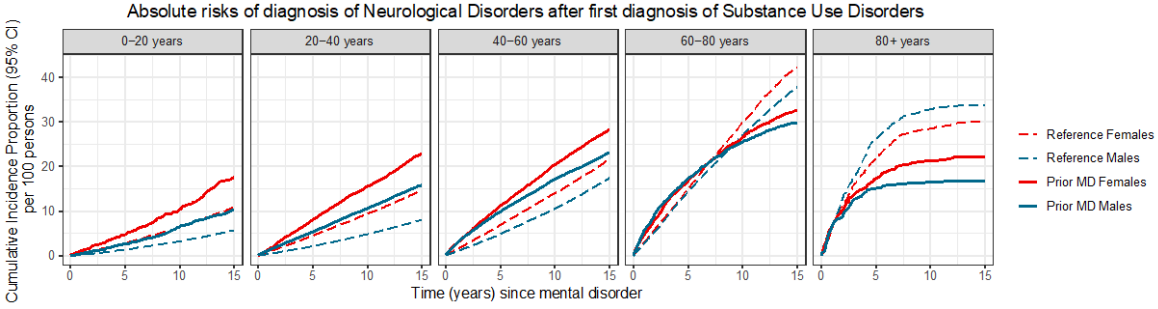


Figure S94.9 – Neurological Conditions



Figures S95.1-S95.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Schizophrenia

Figure S95.1 – Circulatory Conditions

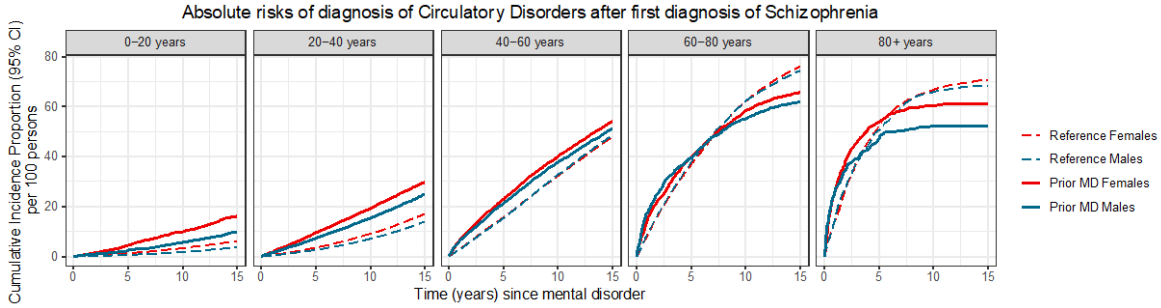


Figure S95.2 – Endocrine Conditions

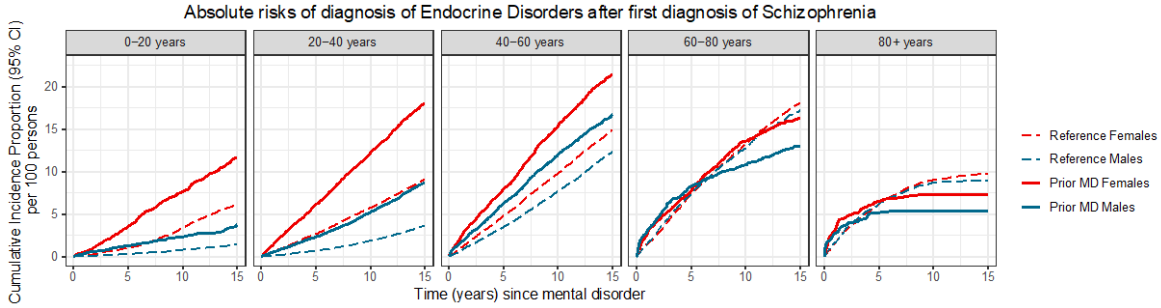


Figure S95.3 – Pulmonary Conditions

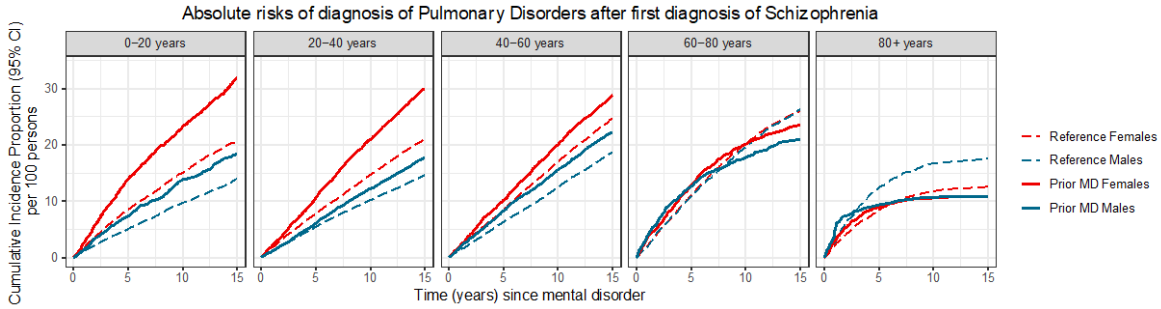


Figure S95.4 – Gastrointestinal Conditions

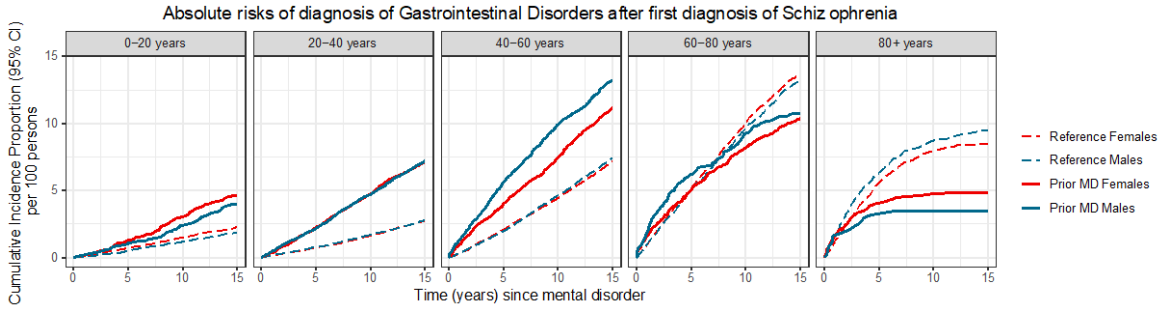


Figure S95.5 – Urogenital Conditions

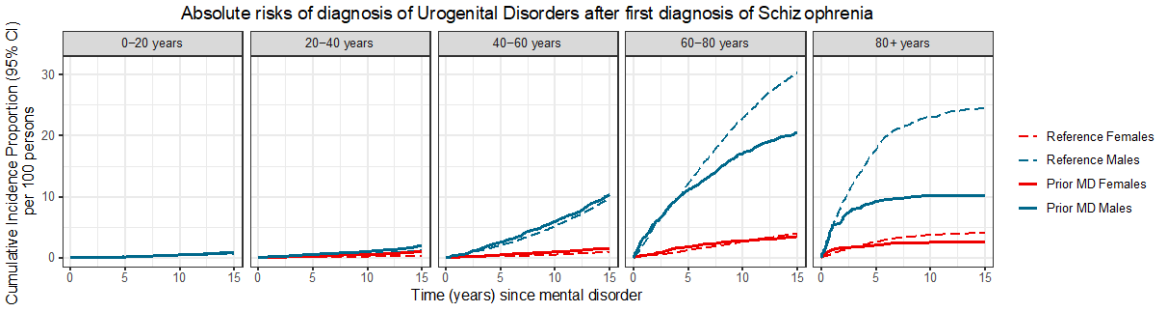


Figure S95.6 – Musculoskeletal Conditions

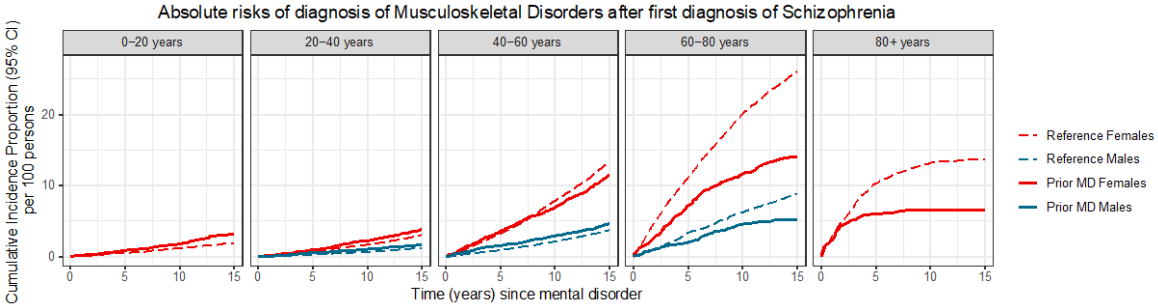


Figure S95.7 – Hematological Conditions

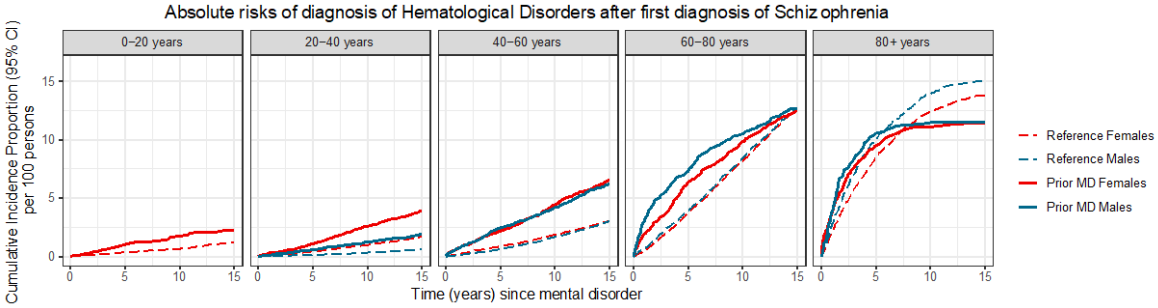


Figure S95.8 – Cancers

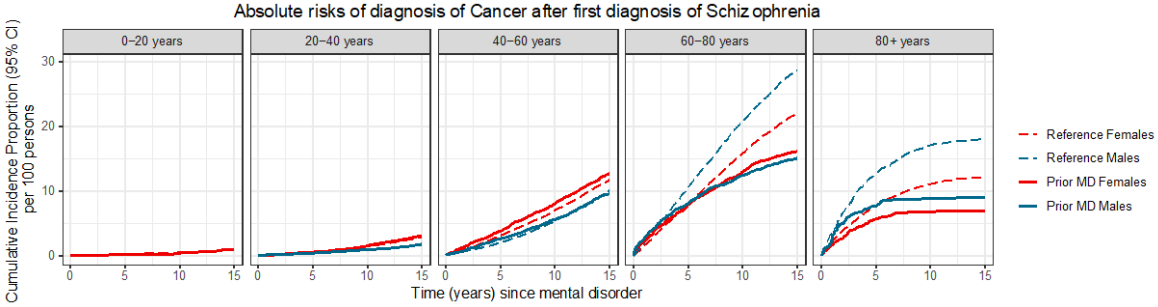
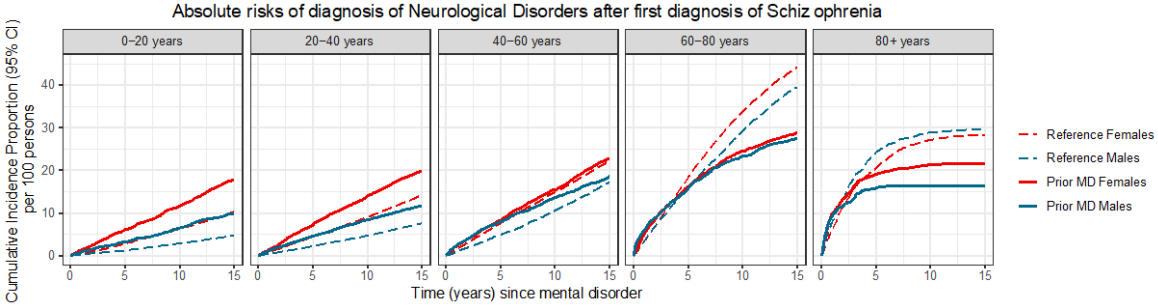


Figure S95.9 – Neurological Conditions



Figures S96.1-S96.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Mood Disorders

Figure S96.1 – Circulatory Conditions

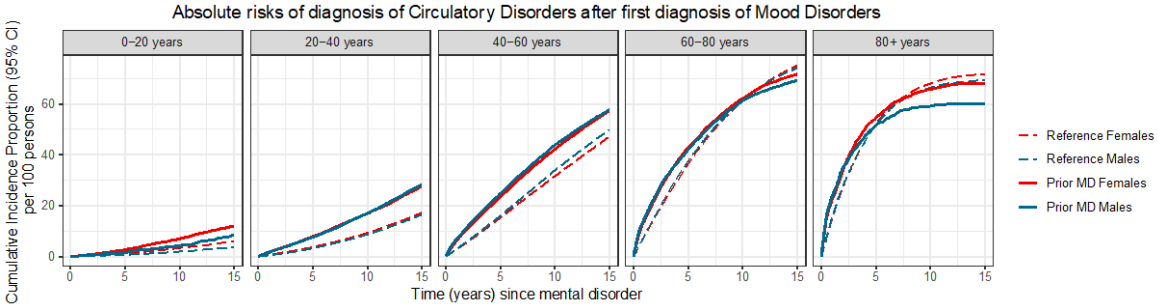


Figure S96.2 – Endocrine Conditions

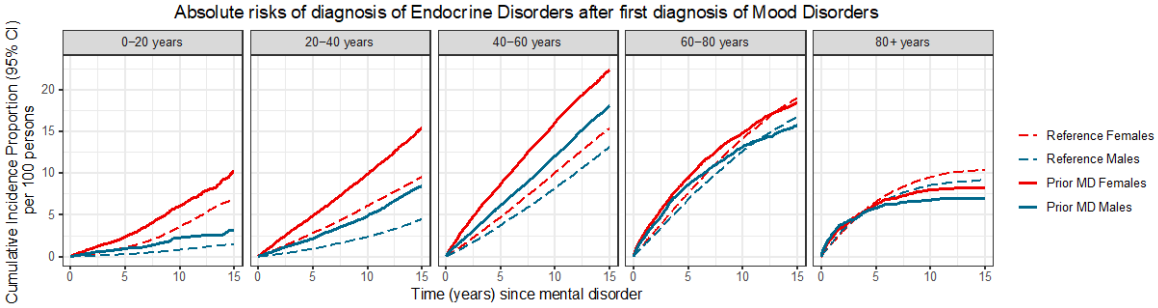


Figure S96.3 – Pulmonary Conditions

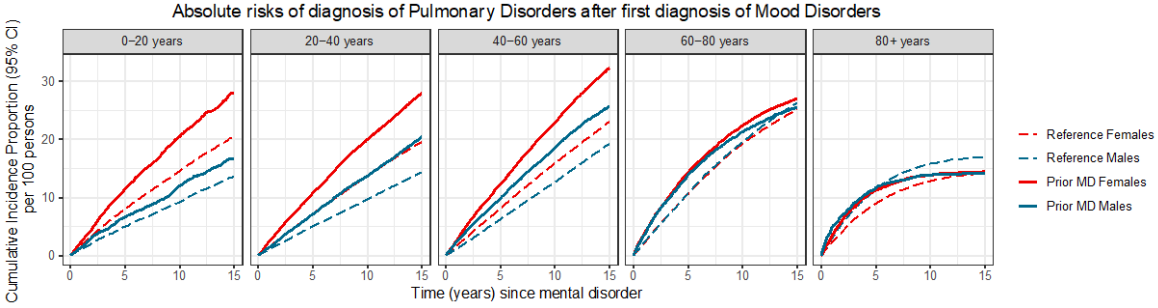


Figure S96.4 – Gastrointestinal Conditions

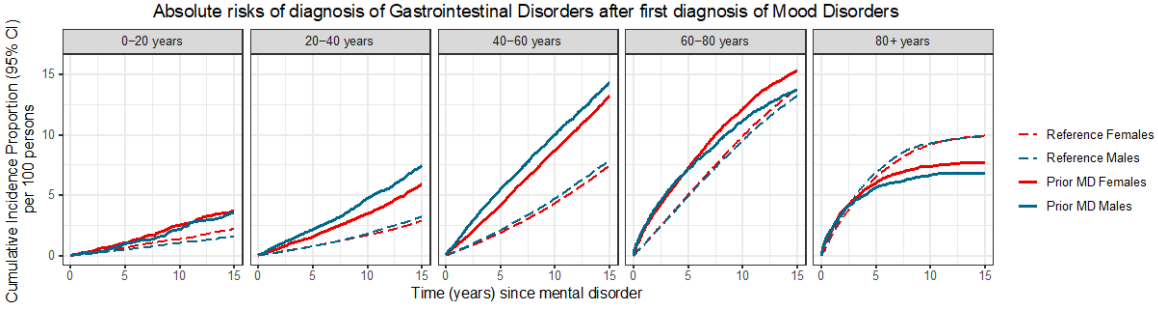


Figure S96.5 – Urogenital Conditions

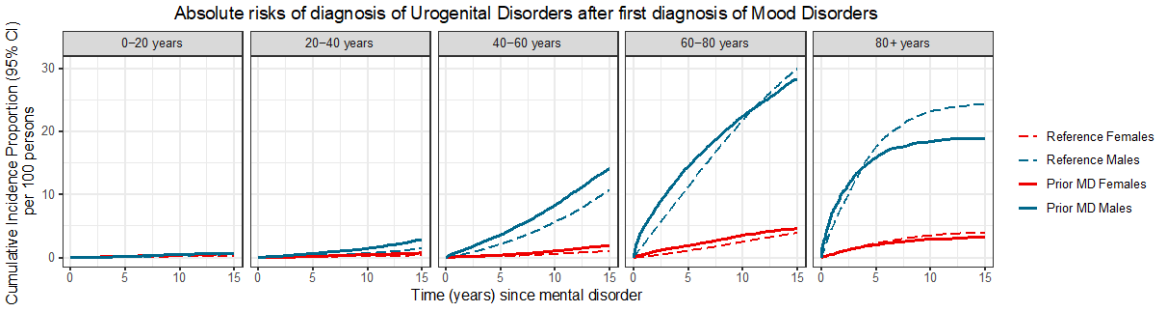


Figure S96.6 – Musculoskeletal Conditions

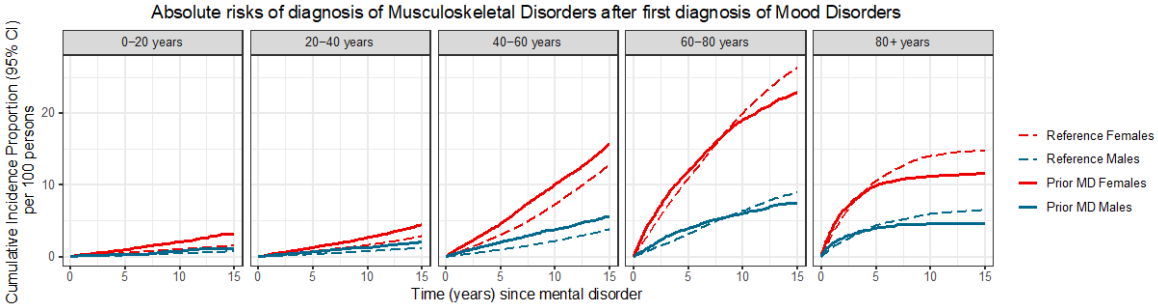


Figure S96.7 – Hematological Conditions

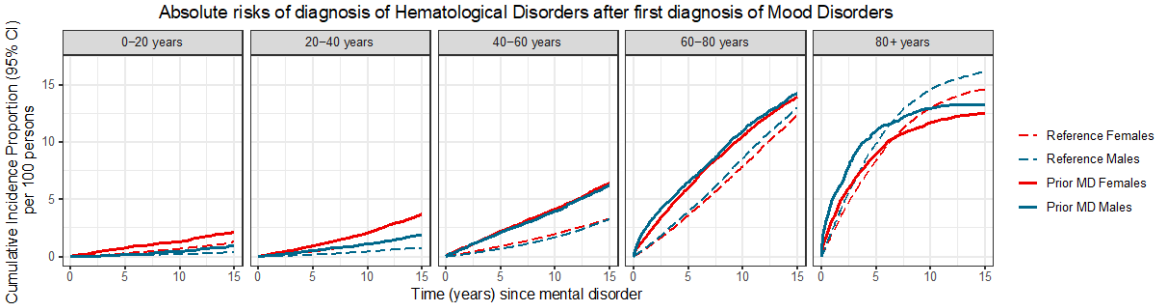


Figure S96.8 – Cancers

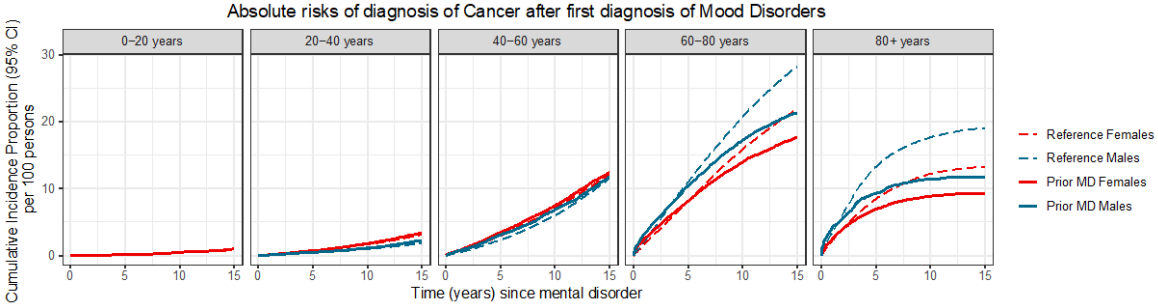
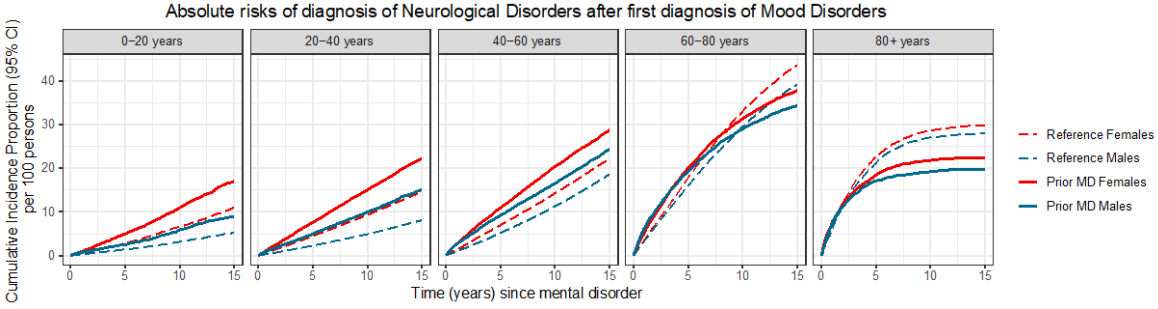


Figure S96.9 – Neurological Conditions



Figures S97.1-S97.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Neurotic Disorders

Figure S97.1 – Circulatory Conditions

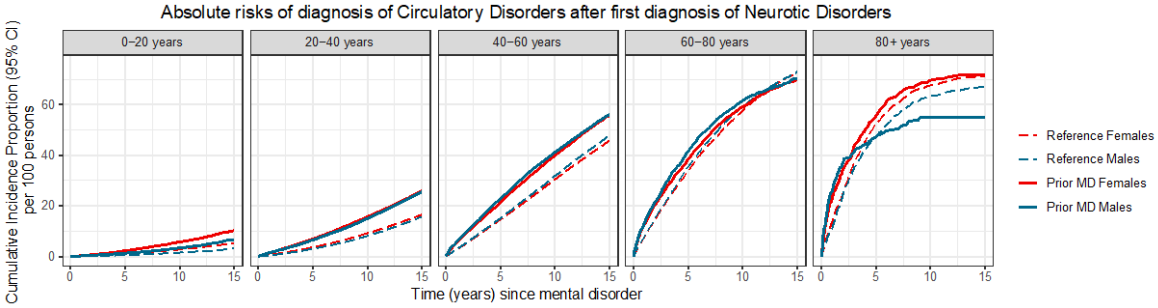


Figure S97.2 – Endocrine Conditions

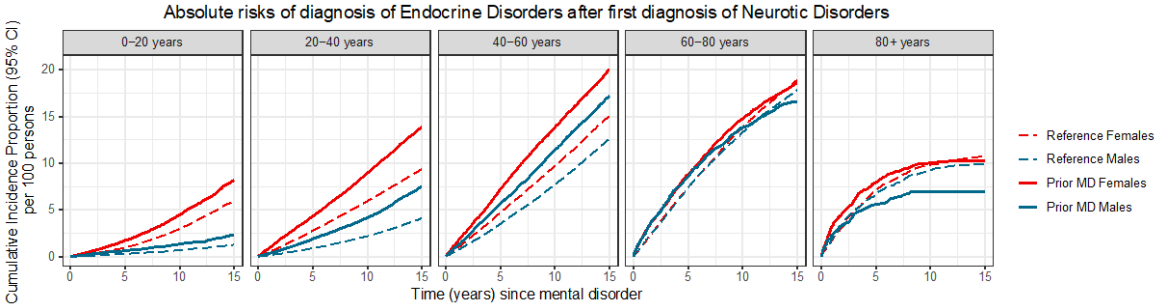


Figure S97.3 – Pulmonary Conditions

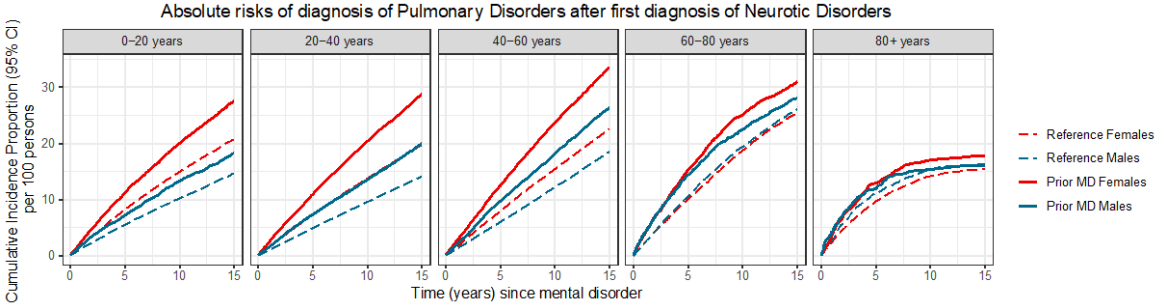


Figure S97.4 – Gastrointestinal Conditions

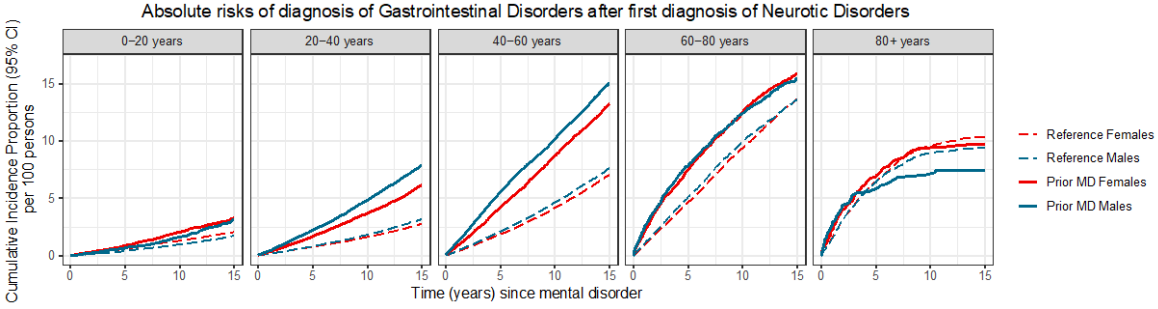


Figure S97.5 – Urogenital Conditions

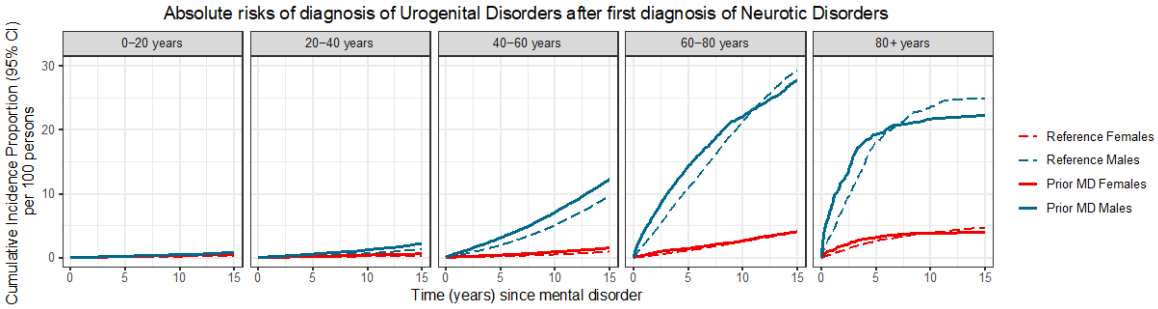


Figure S97.6 – Musculoskeletal Conditions

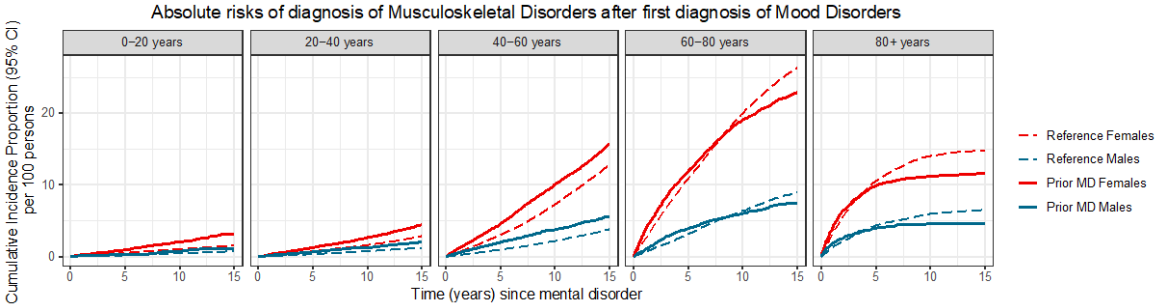


Figure S97.7 – Hematological Conditions

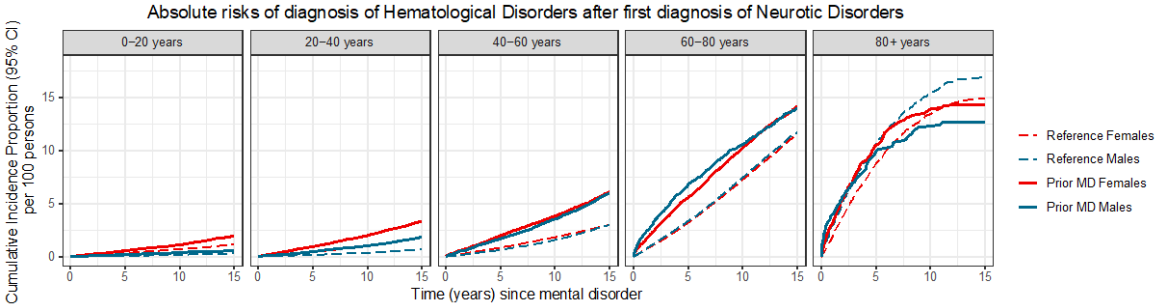


Figure S97.8 – Cancers

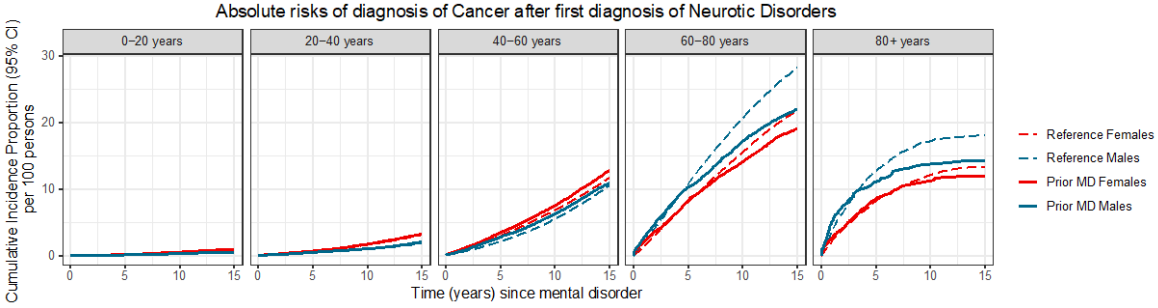
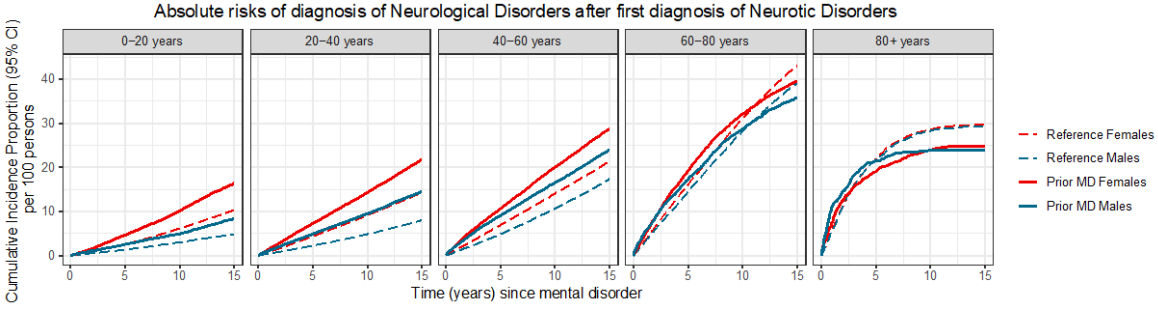


Figure S97.9 – Neurological Conditions



Figures S98.1-S98.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Eating Disorders

Figure S98.1 – Circulatory Conditions

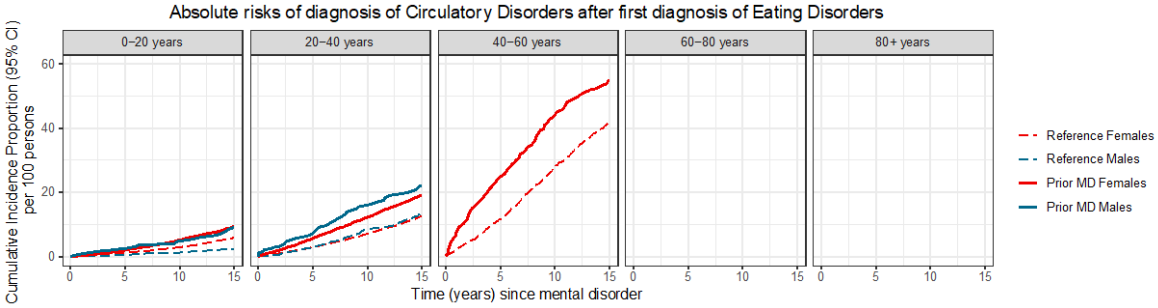


Figure S98.2 – Endocrine Conditions

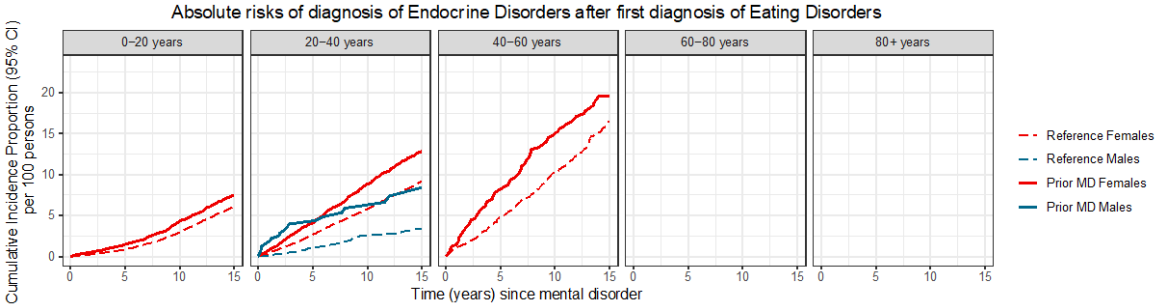


Figure S98.3 – Pulmonary Conditions

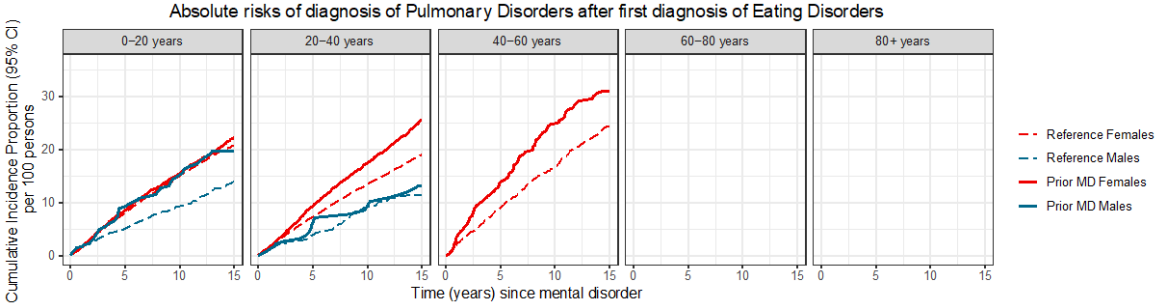


Figure S98.4 – Gastrointestinal Conditions

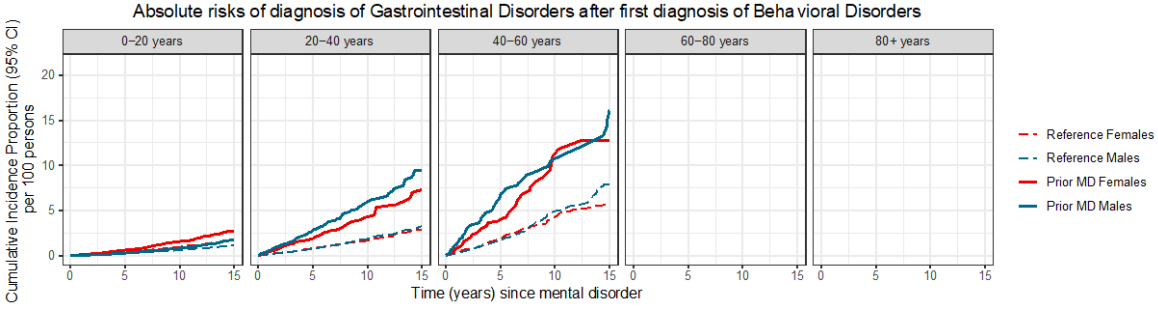


Figure S98.5 – Urogenital Conditions

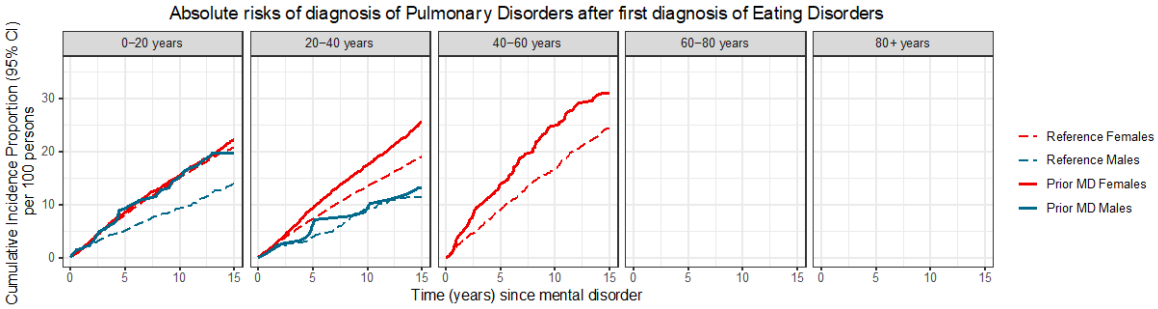


Figure S98.6 – Musculoskeletal Conditions

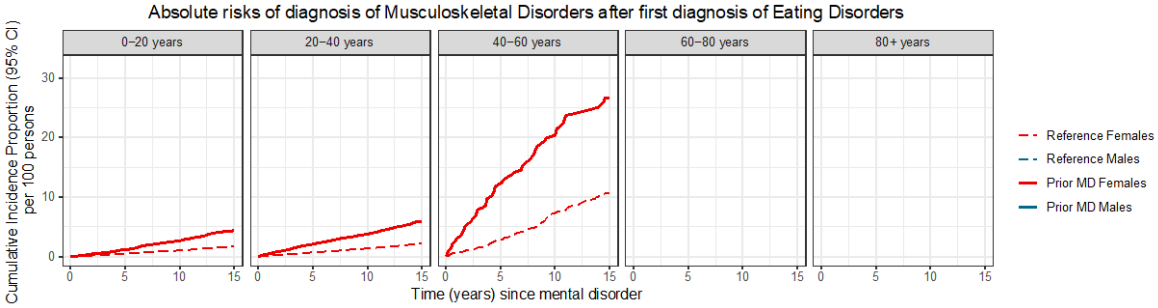


Figure S98.7 – Hematological Conditions

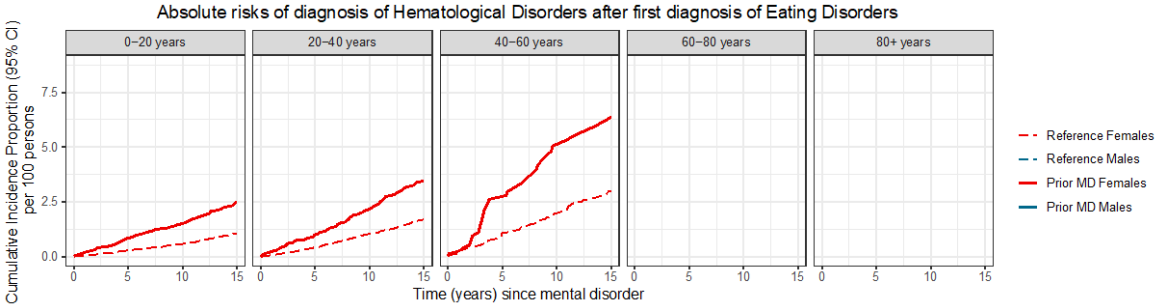


Figure S98.8 – Cancers

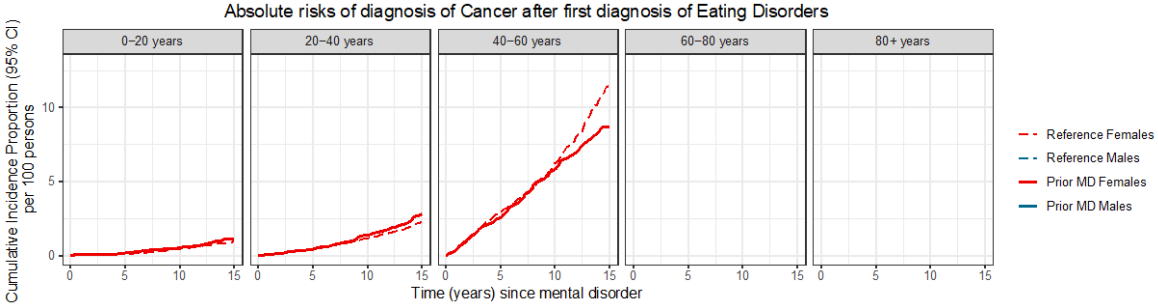
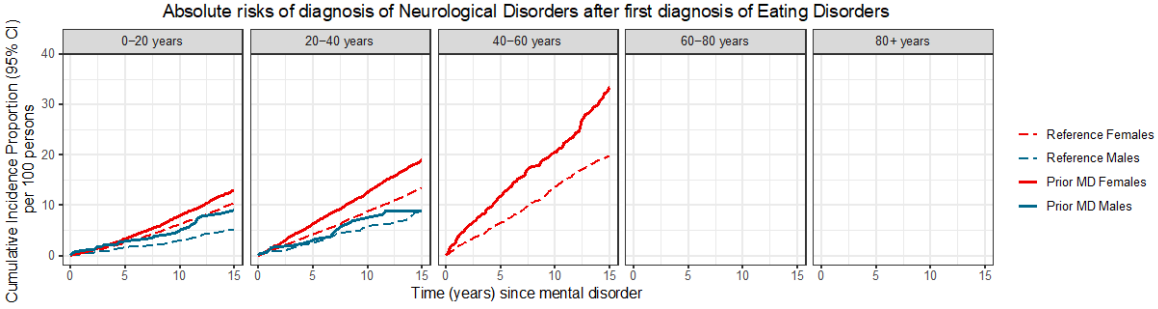


Figure S98.9 – Neurological Conditions



Figures S99.1-S99.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Personality Disorder

Figure S99.1 – Circulatory Conditions

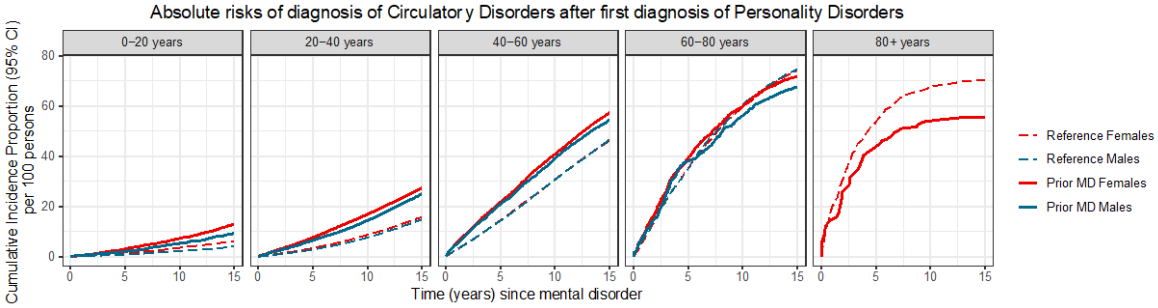


Figure S99.2 – Endocrine Conditions

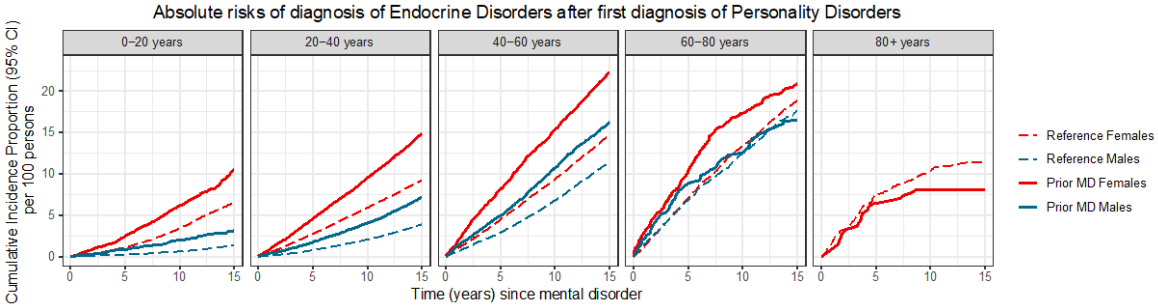


Figure S99.3 – Pulmonary Conditions

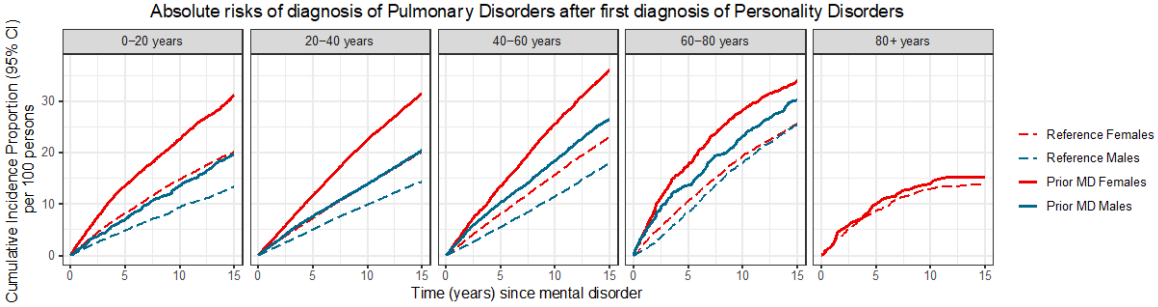


Figure S99.4 – Gastrointestinal Conditions

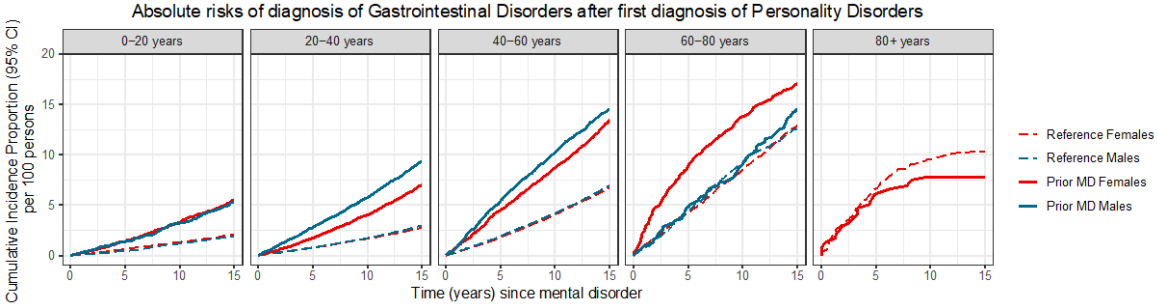


Figure S99.5 – Urogenital Conditions

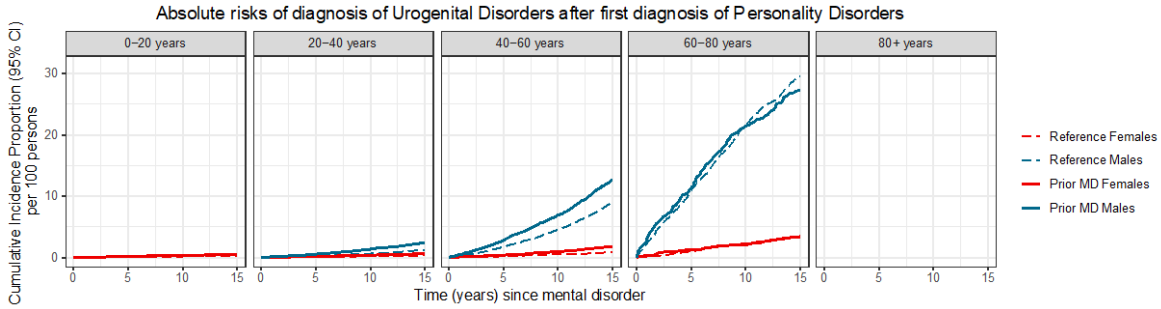


Figure S99.6 – Musculoskeletal Conditions

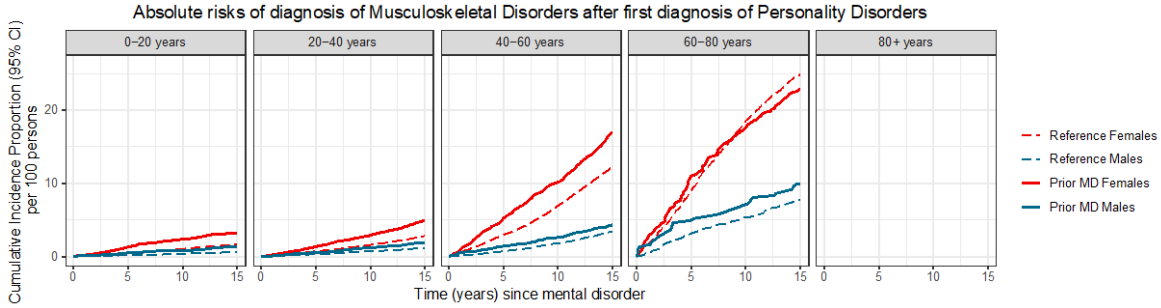


Figure S99.7 – Hematological Conditions

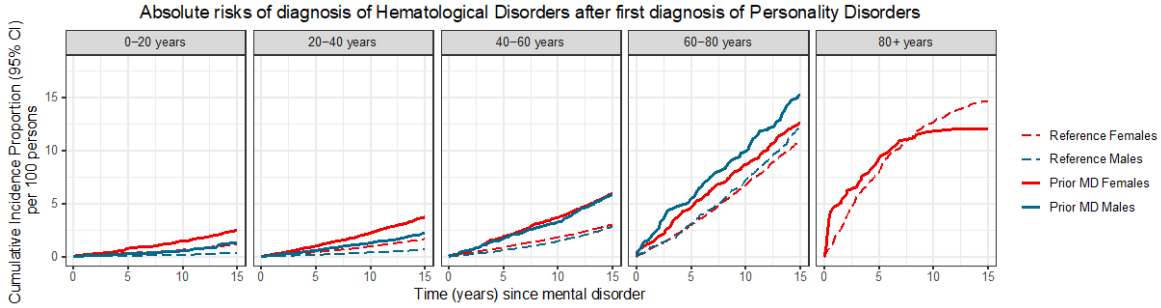


Figure S99.8 – Cancers

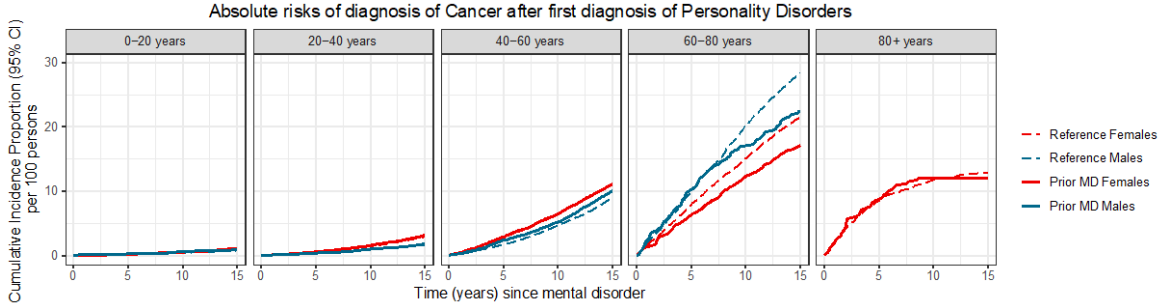
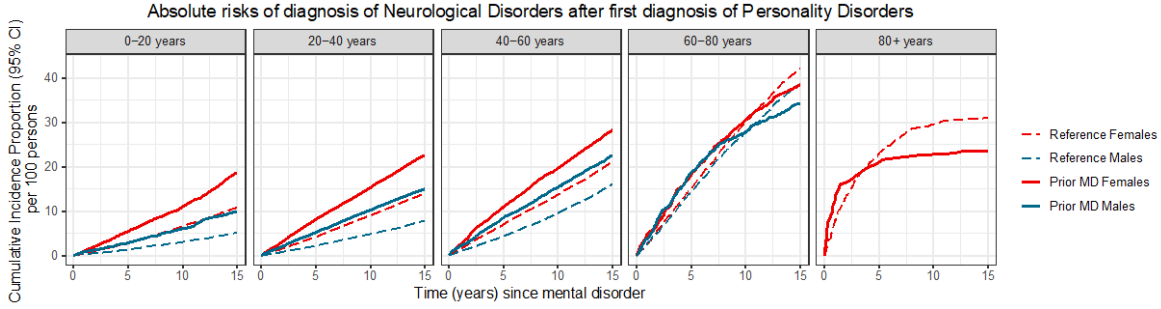


Figure S99.9 – Neurological Conditions



Figures S100.1-100.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Intellectual Disabilities

Figure S100.1 – Circulatory Conditions

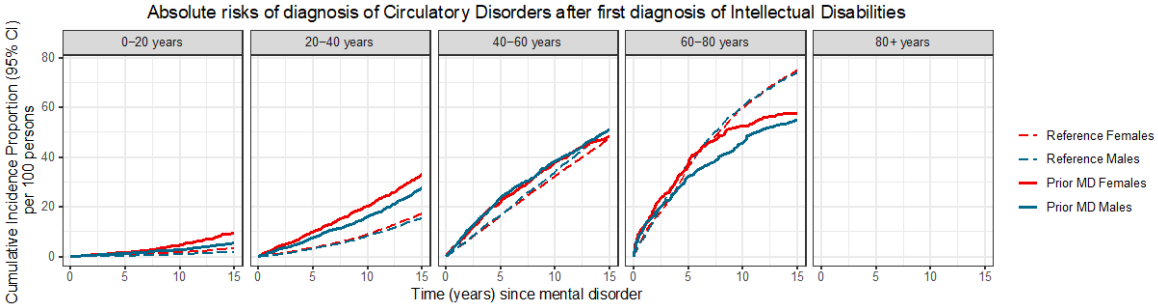


Figure S100.2 – Endocrine Conditions

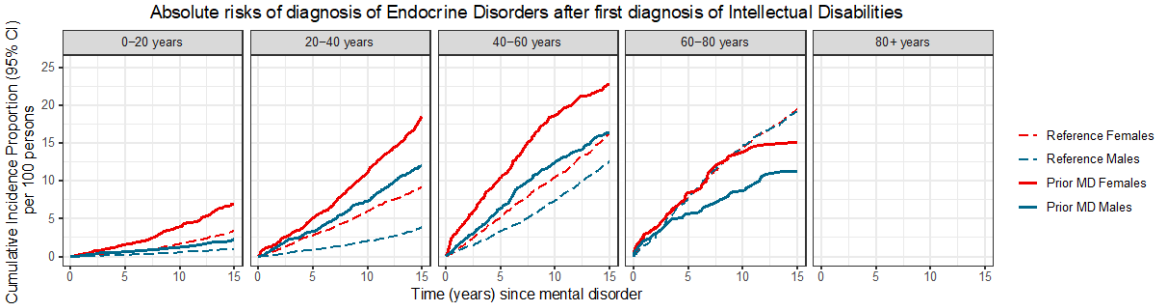


Figure S100.3 – Pulmonary Conditions

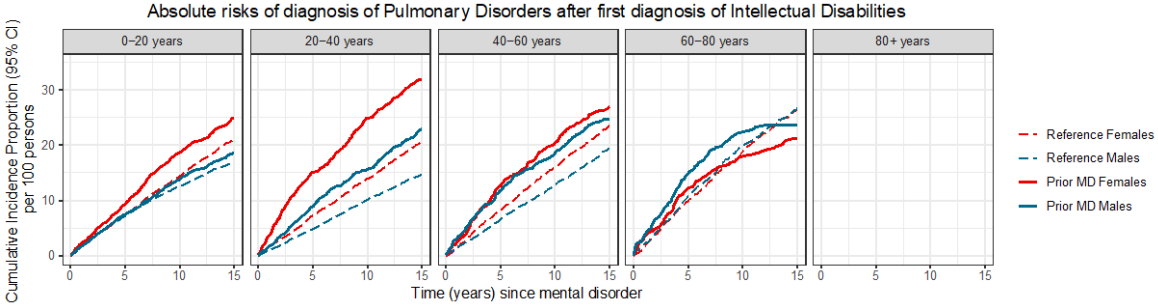


Figure S100.4 – Gastrointestinal Conditions

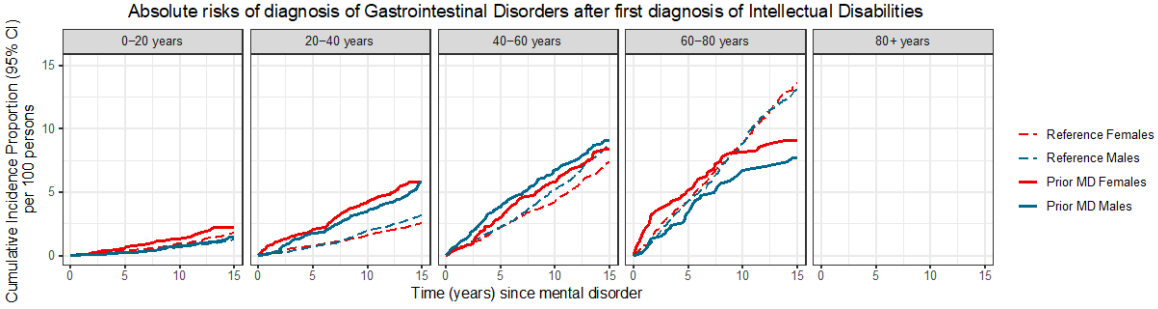


Figure S100.5 – Urogenital Conditions

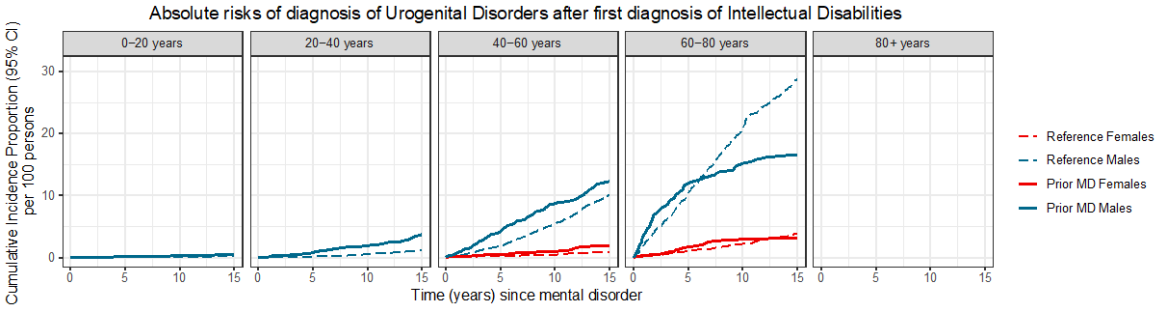


Figure S100.6 – Musculoskeletal Conditions

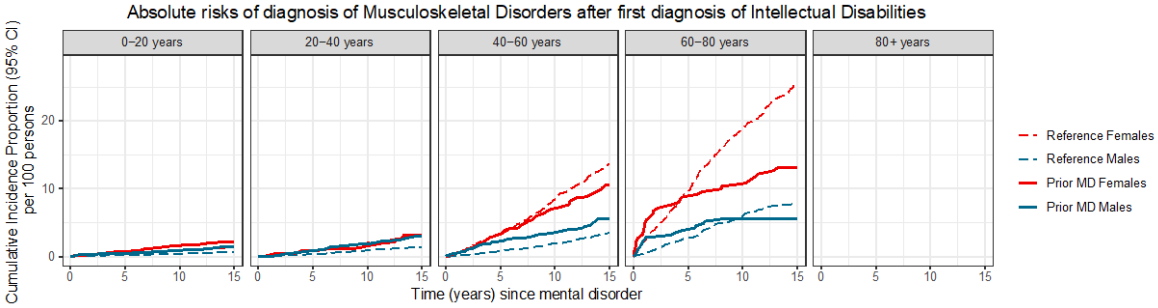


Figure S100.7 – Hematological Conditions

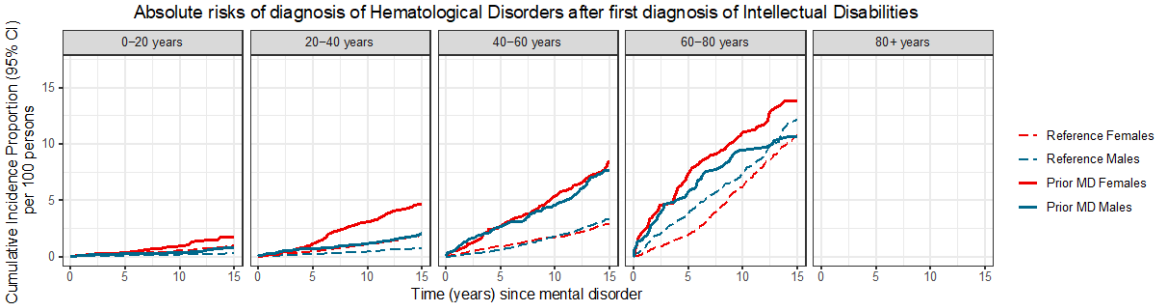


Figure S100.8 – Cancers

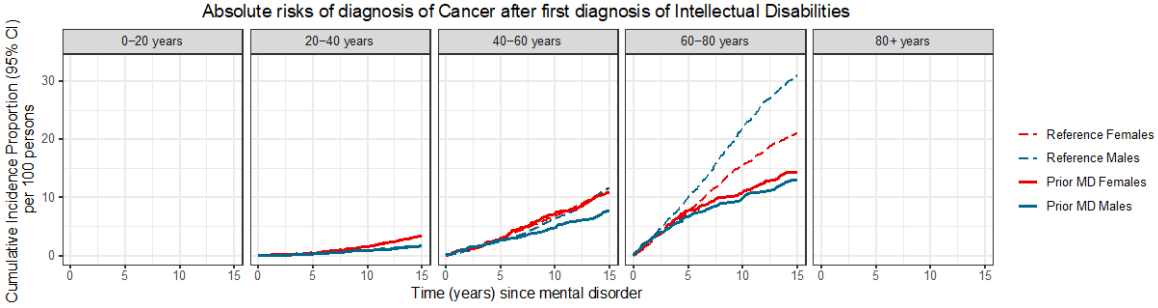
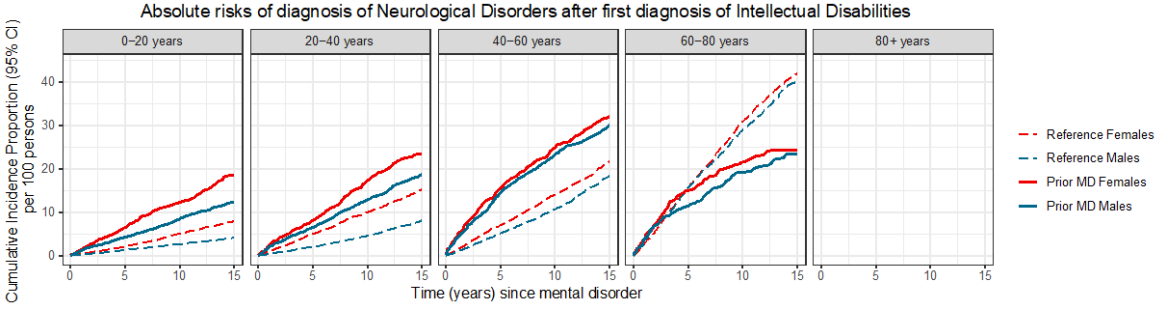


Figure S100.9 – Neurological Conditions



Figures S101.1-101.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Developmental Disorder

Figure S101.1 – Circulatory Conditions

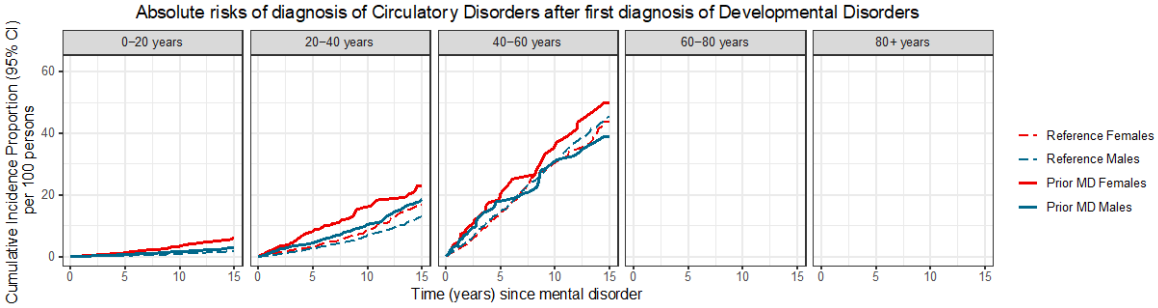


Figure S101.2 – Endocrine Conditions

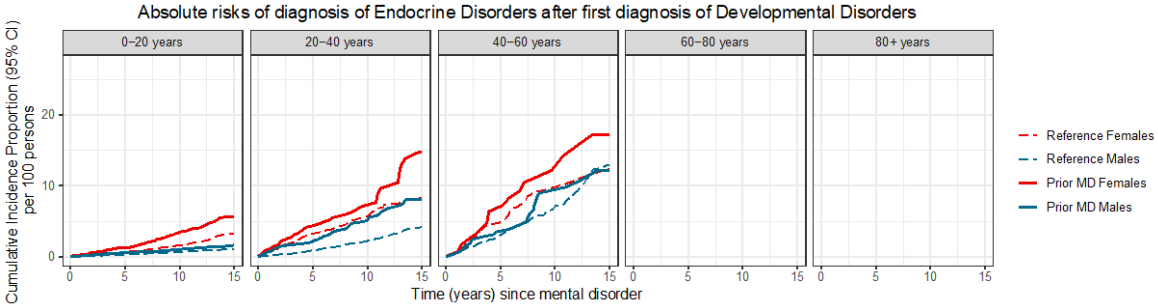


Figure S101.3 – Pulmonary Conditions

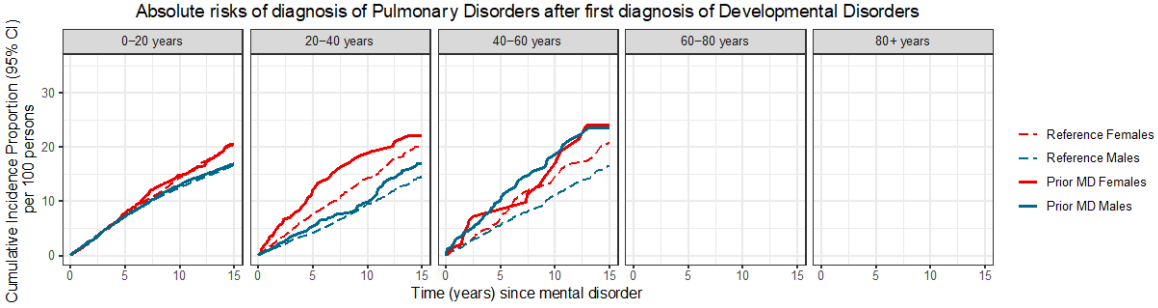


Figure S101.4 – Gastrointestinal Conditions

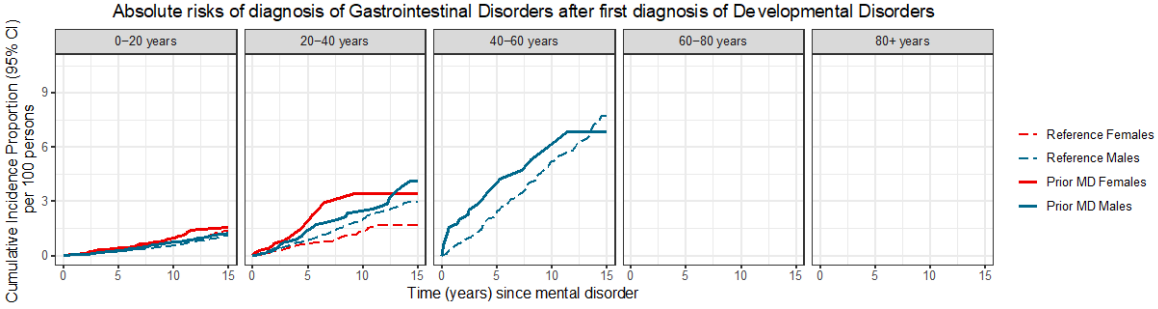


Figure S101.5 – Urogenital Conditions

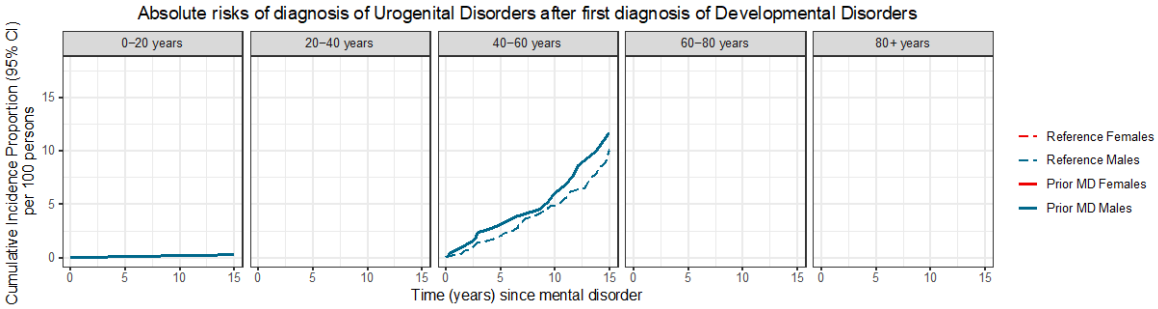


Figure S101.6 – Musculoskeletal Conditions

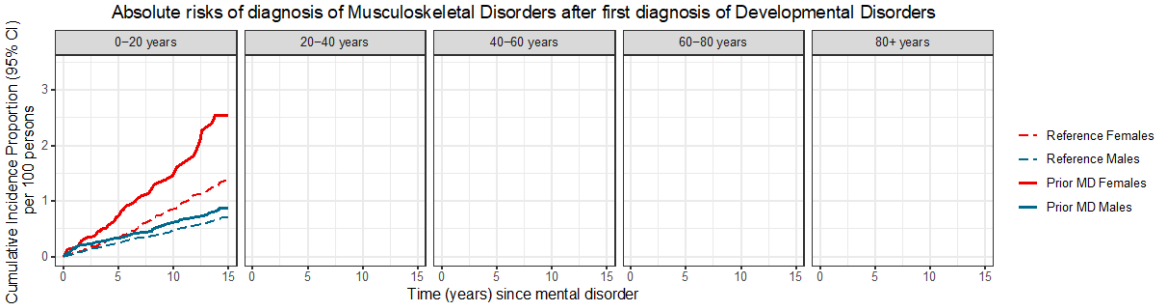


Figure S101.7 – Hematological Conditions

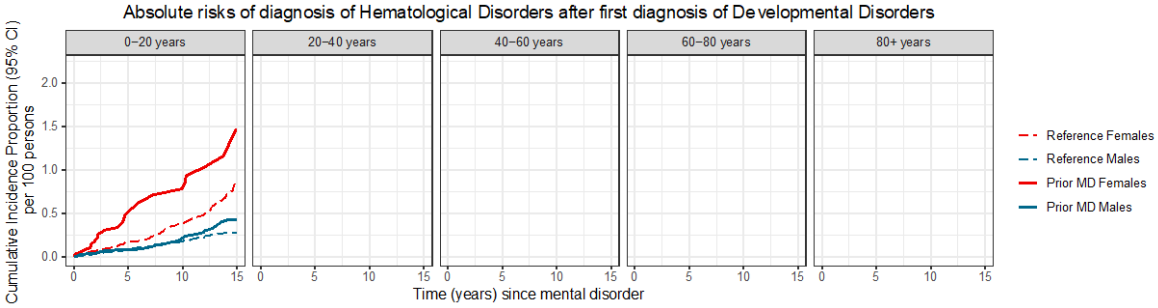


Figure S101.8 – Cancers

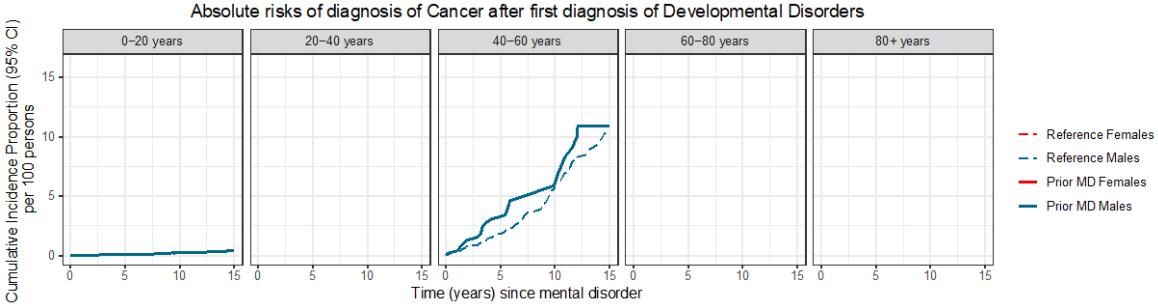
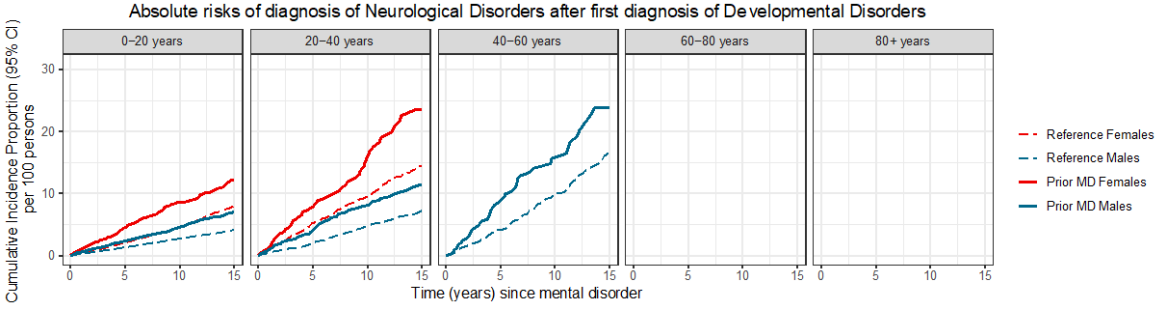


Figure S101.9 – Neurological Conditions



Figures S102.1-102.9. Absolute risks of being diagnosed with general medical conditions after first diagnosis of Behavioral Disorder

Figure S102.1 – Circulatory Conditions

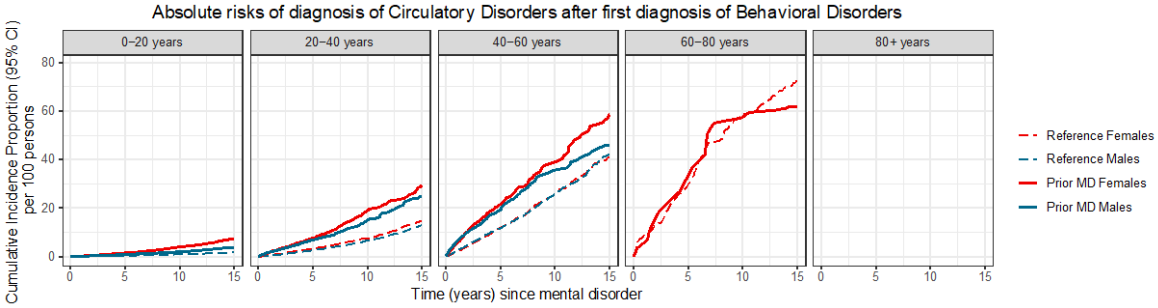


Figure S102.2 – Endocrine Conditions

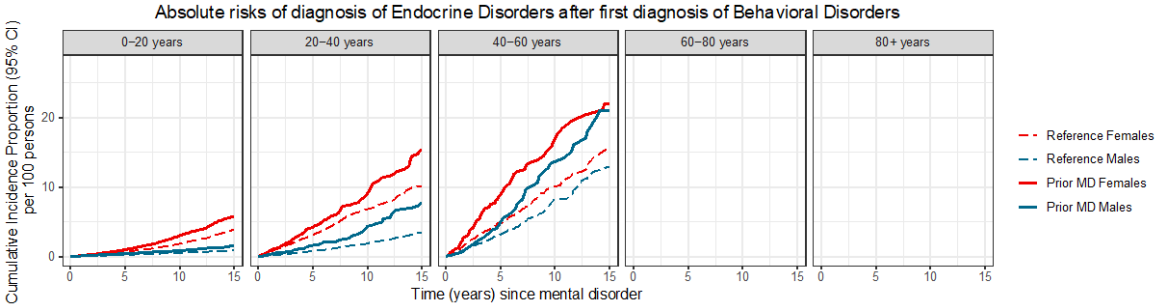


Figure S102.3 – Pulmonary Conditions

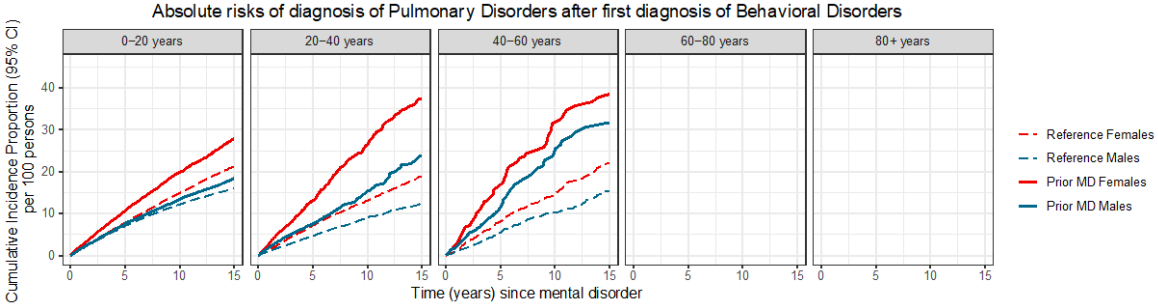


Figure S102.4 – Gastrointestinal Conditions

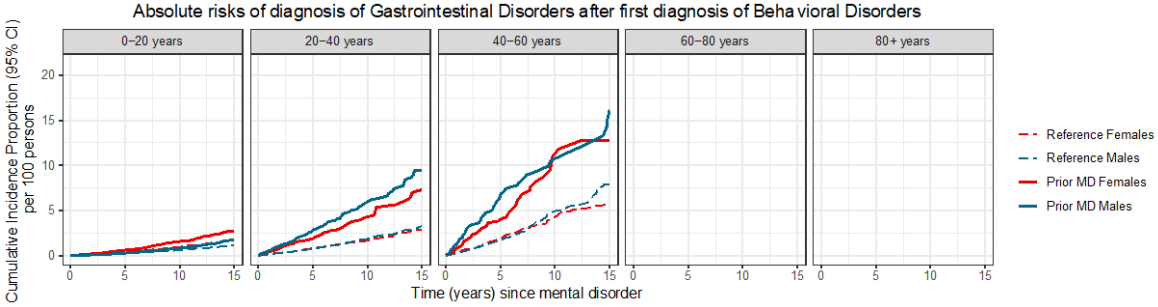


Figure S102.5 – Urogenital Conditions

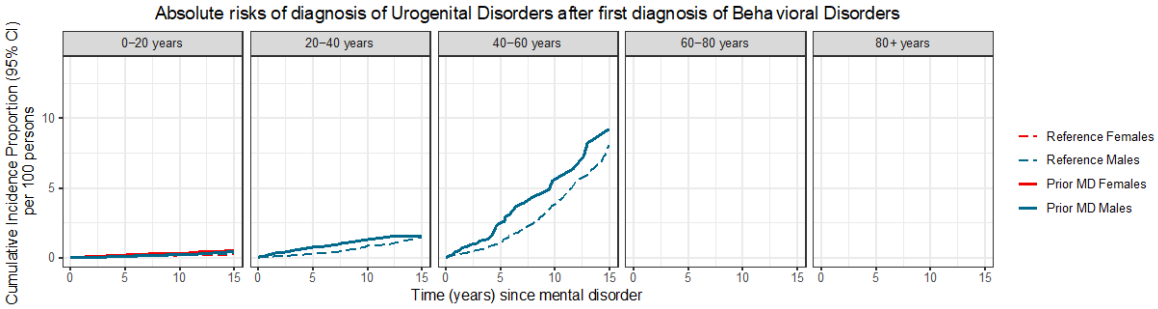


Figure S102.6 – Musculoskeletal Conditions

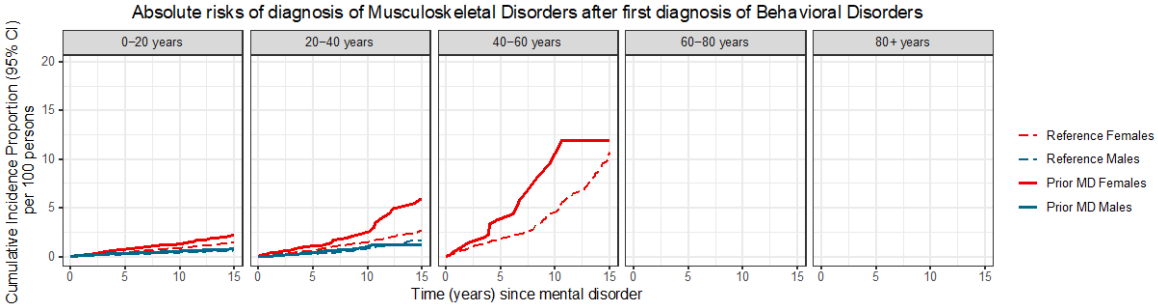


Figure S102.7 – Hematological Conditions

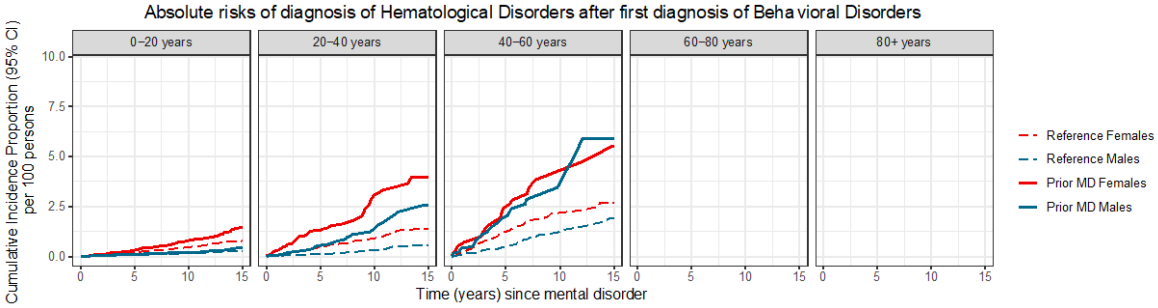


Figure S102.8 – Cancers

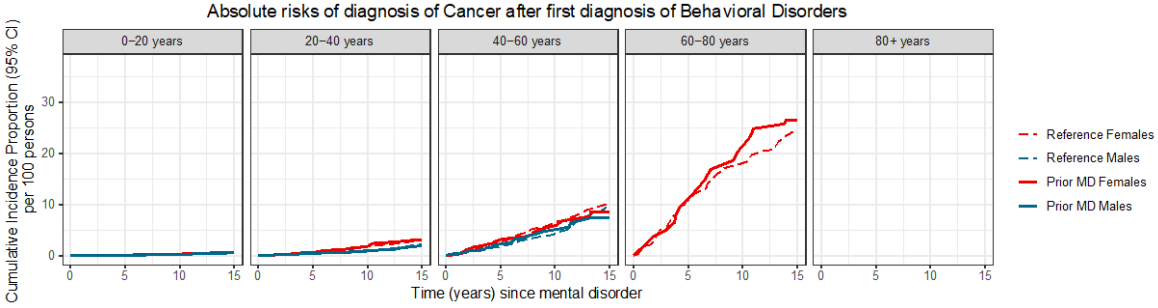
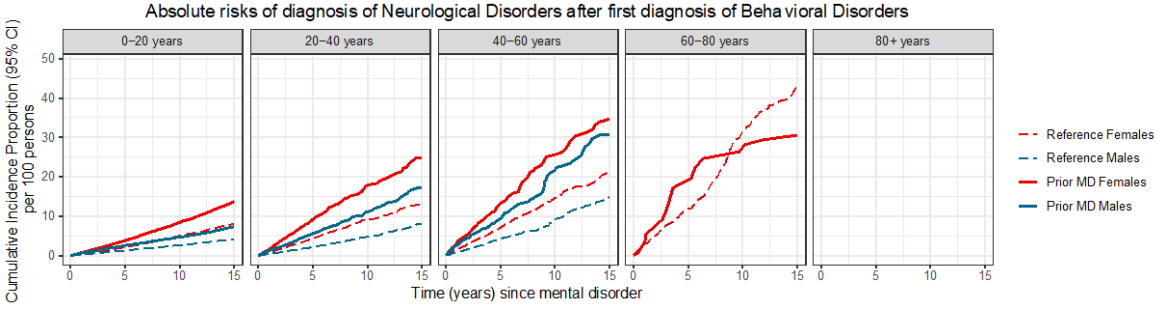


Figure S102.9 – Neurological Conditions



Figures S103-S122. Absolute risks of specific general medical conditions after a diagnosis of a mental disorder

The following set of figures shows the sex- and time-specific absolute risks of being diagnosed with general medical conditions after being previously diagnosed with one of the mental disorders, organized by general medical condition category. They show the cumulative incidence proportions (CIPs) and 95% confidence intervals (95% CIs) estimated across all ages of being diagnosed with each general medical condition (shown as label at the top of each panel). Each person diagnosed with a specific mental disorder was matched to up to five 'reference individuals' of the same sex and born within 30 days of them. CIPs are shown for both those who were diagnosed with a specific mental disorder from the time of diagnosis (bold, solid line) and the reference group (dashed lines).

Two graphs are provided for each mental disorder: CIPs for all persons (black lines) and sex-specific CIPs (males indicated by blue lines, females by red). Confidence intervals are displayed only for those with prior mental disorder, as the 95% CIs for the reference group will be proportional to those for people with prior mental disorders, but smaller. In some cases, 95% CIs are too small to be visible.

The horizontal axes show the time since first diagnosis of the mental disorder (or since diagnosis of the person reference individuals were matched to). The vertical axes show the cumulative incidence proportions and 95% CIs (note these axes vary for each set of graphs).

Estimates with fewer than 50 persons at risk or fewer than 15 cases are not shown. Where numbers were too small to show CIPs for those with mental disorders, reference CIPs are not displayed either.

Displaying estimates for all persons

The y-axis varies for each graph, however they range from 0 to a maximum of 59

S103. Organic Disorders
S104. Substance Use Disorders
S105. Schizophrenia
S106. Mood Disorders
S107. Neurotic Disorders
S108. Eating Disorders
S109. Personality Disorders
S110. Intellectual Disorders
S111. Developmental Disorders
S112. Behavioral Disorders

Displaying sex-specific estimates

The y-axis varies for each graph, however they range from 0 to a maximum of 66

S113. Organic Disorders
S114. Substance Use Disorders
S115. Schizophrenia
S116. Mood Disorders
S117. Neurotic Disorders
S118. Eating Disorders
S119. Personality Disorders
S120. Intellectual Disorders
S121. Developmental Disorders
S122. Behavioral Disorders

Figures S103.1-S103.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Organic Disorders

Figure S103.1 – Circulatory Conditions

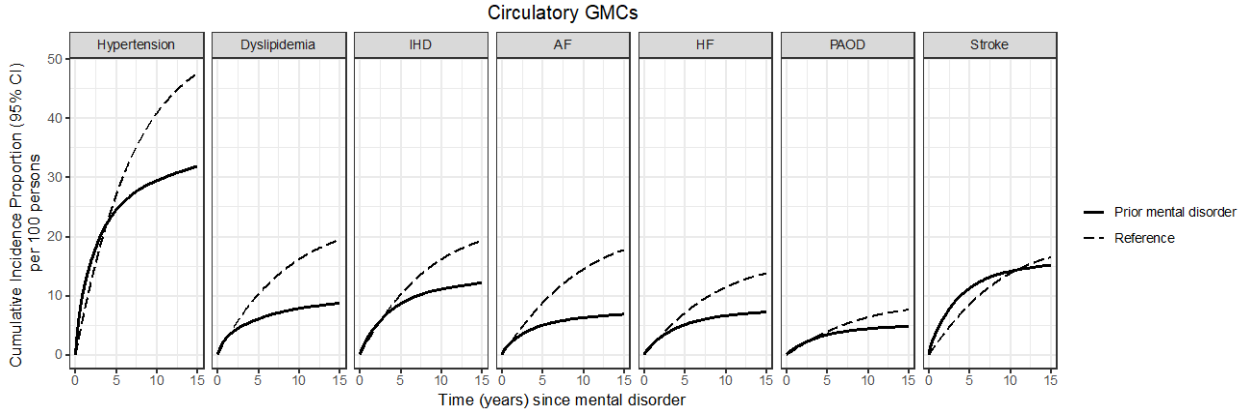


Figure S103.2 – Endocrine Conditions

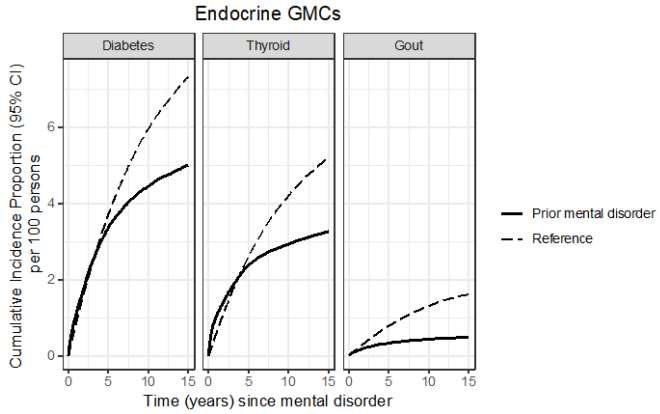


Figure S103.3 – Pulmonary Conditions

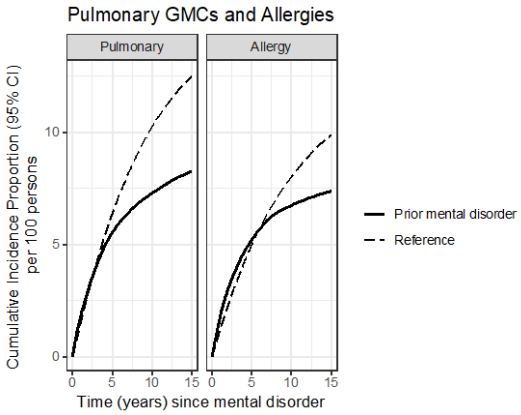


Figure S103.4 – Gastrointestinal Conditions

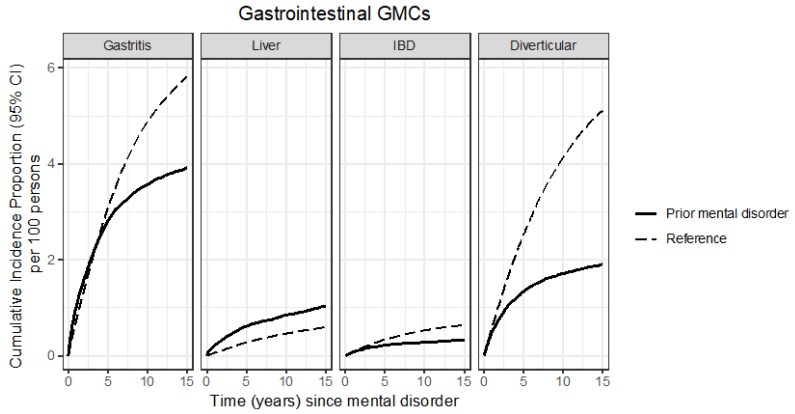


Figure S103.5 – Urogenital Conditions

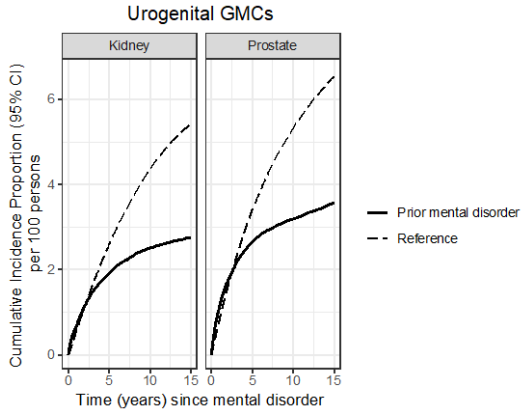


Figure S103.6 – Musculoskeletal Conditions

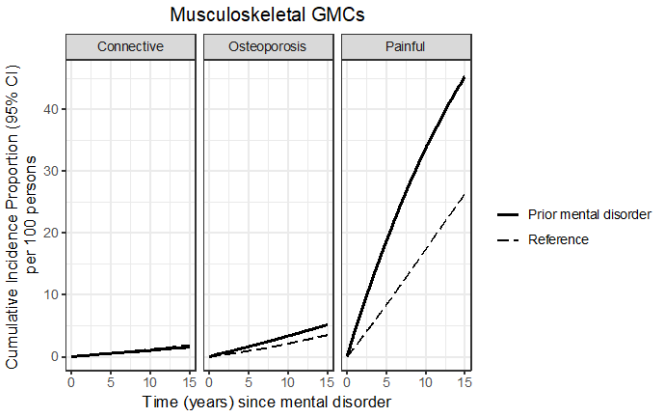


Figure S103.7 – Hematological Conditions

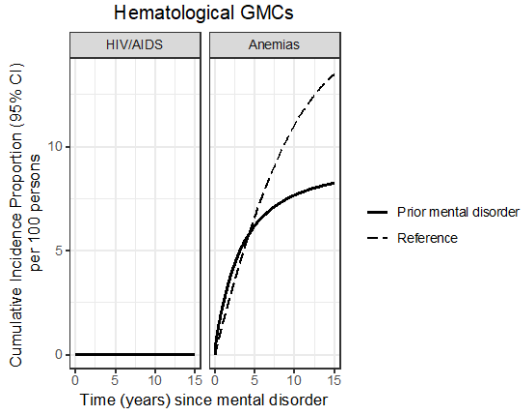


Figure S103.8 – Cancers

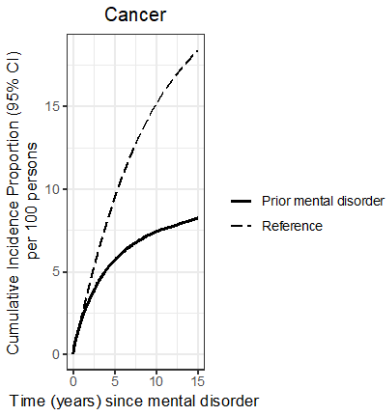
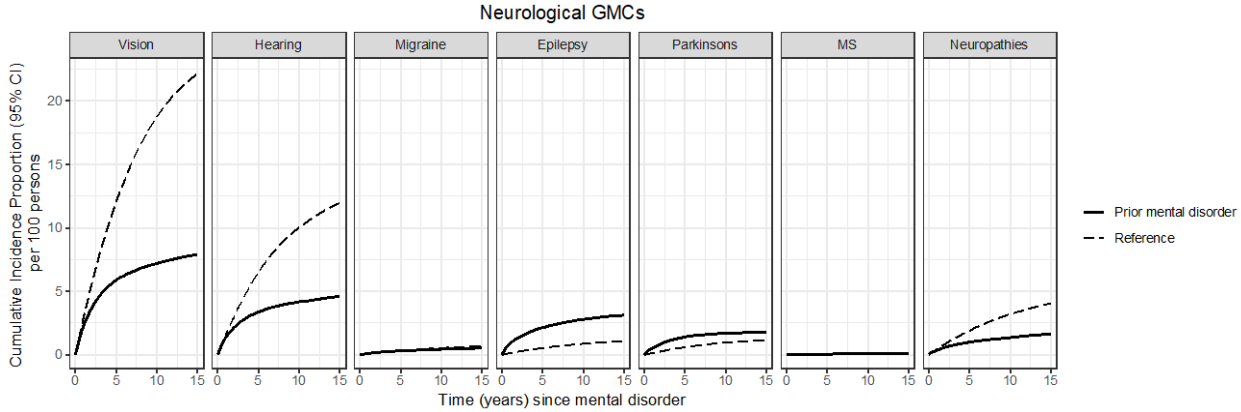


Figure S103.9 – Neurological Conditions



Figures S104.1-S104.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Substance Use Disorders

Figure S104.1 – Circulatory Conditions

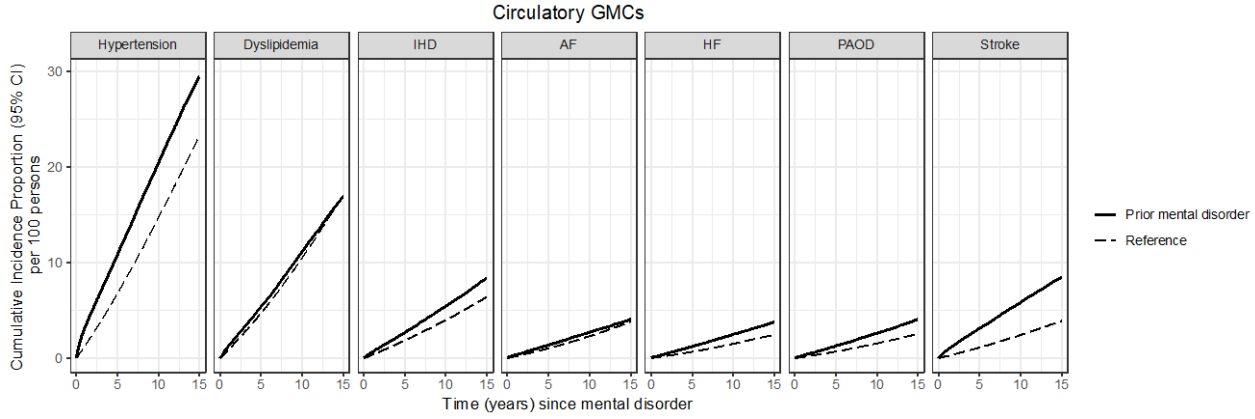


Figure S104.2 – Endocrine Conditions

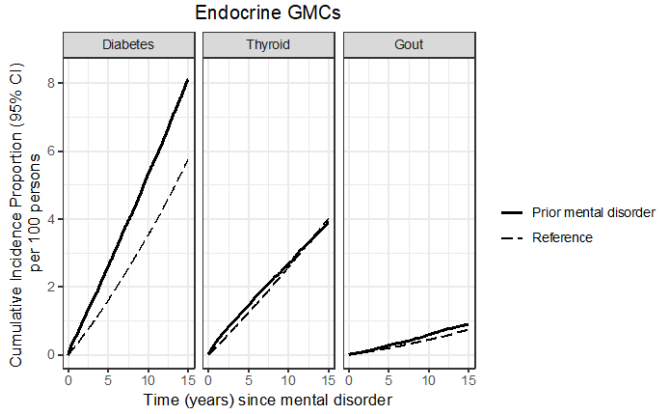


Figure S104.3 – Pulmonary Conditions

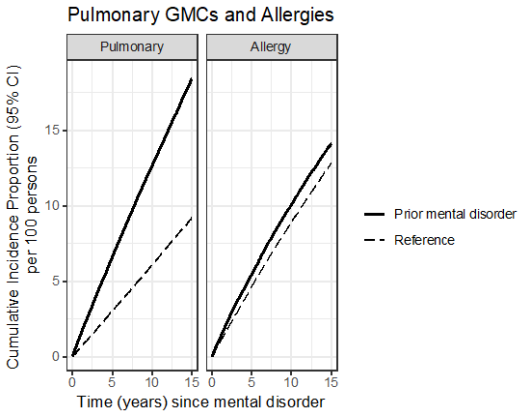


Figure S104.4 – Gastrointestinal Conditions

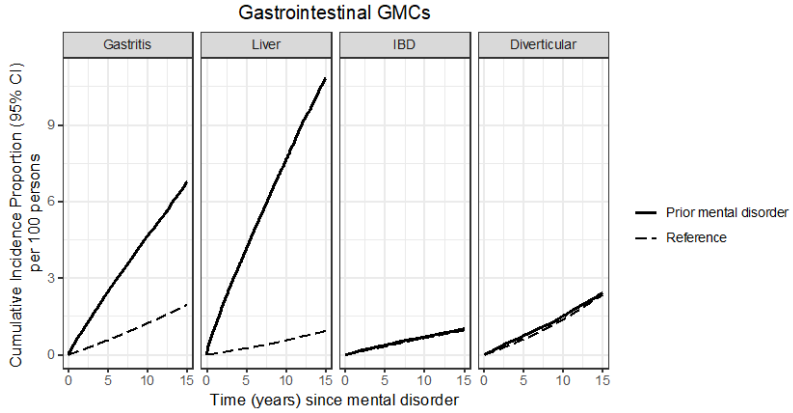


Figure S104.5 – Urogenital Conditions

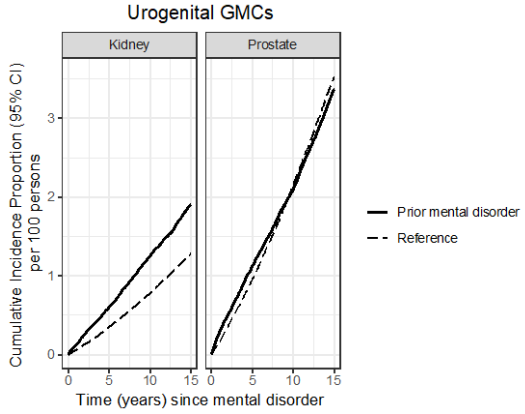


Figure S104.6 – Musculoskeletal Conditions

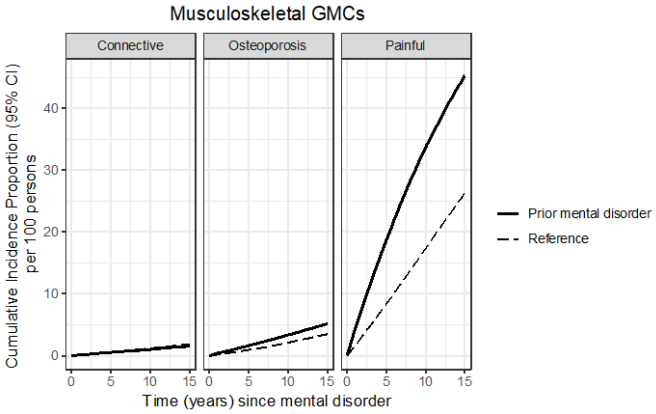


Figure S104.7 – Hematological Conditions

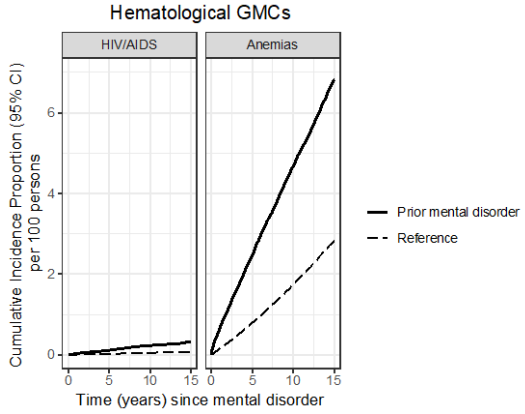


Figure S104.8 – Cancer

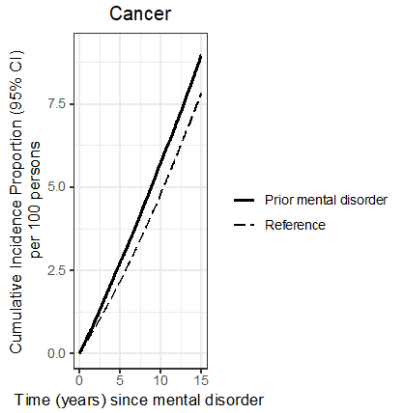
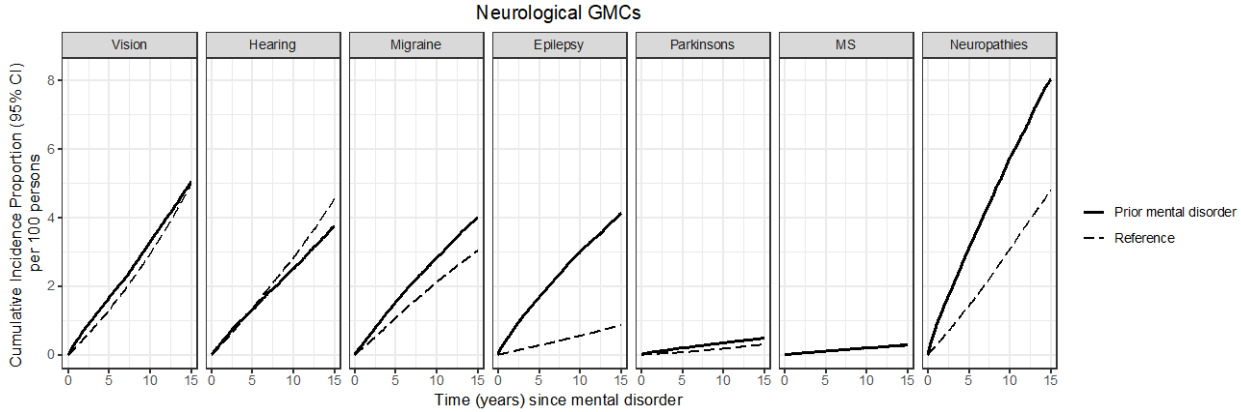


Figure S104.9 – Neurological Conditions



Figures S105.1-S105.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Schizophrenia

Figure S105.1 – Circulatory Conditions

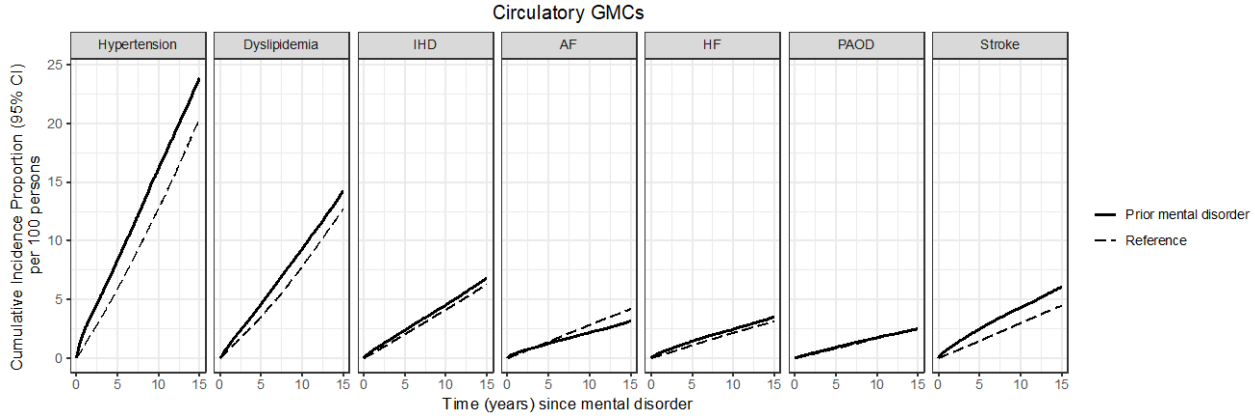


Figure S105.2 – Endocrine Conditions

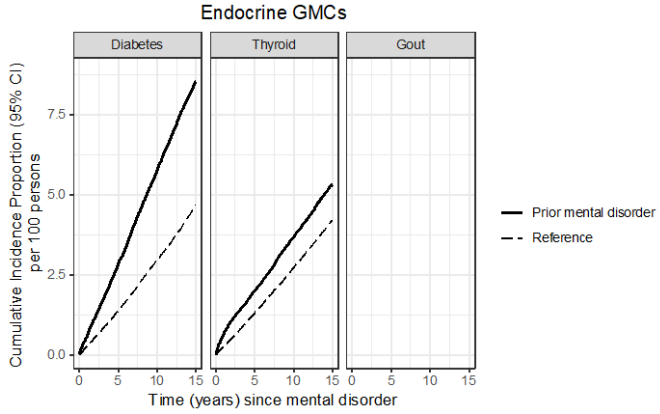


Figure S105.3 – Pulmonary Conditions

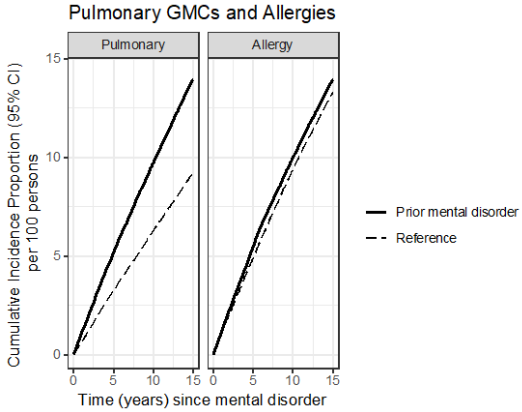


Figure S105.4 – Gastrointestinal Conditions

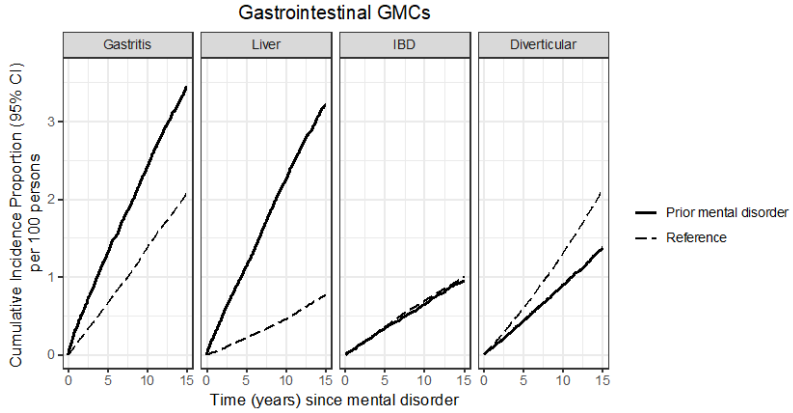


Figure S105.5 – Urogenital Conditions

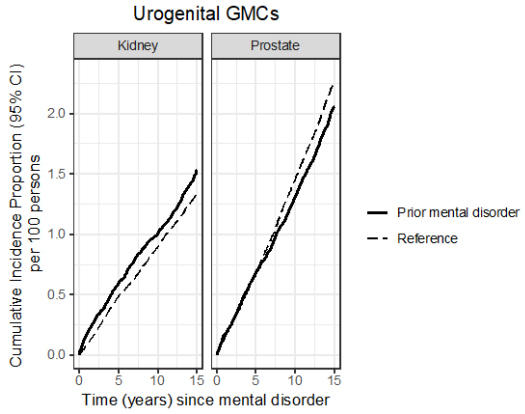


Figure S105.6 – Musculoskeletal Conditions

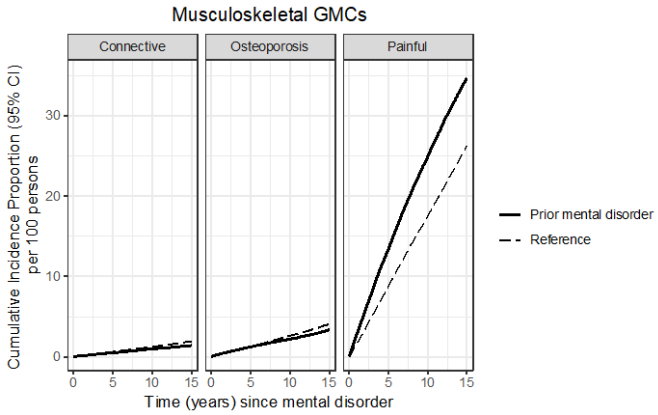


Figure S105.7 – Hematological Conditions

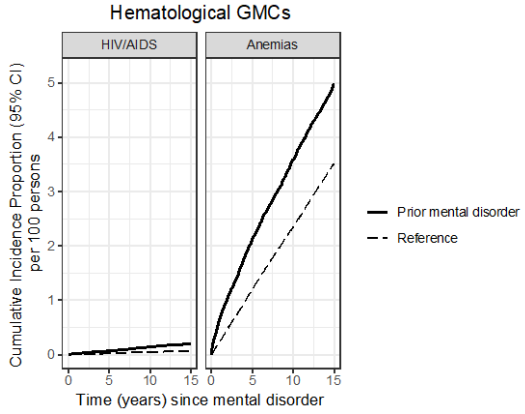


Figure S105.8 – Cancers

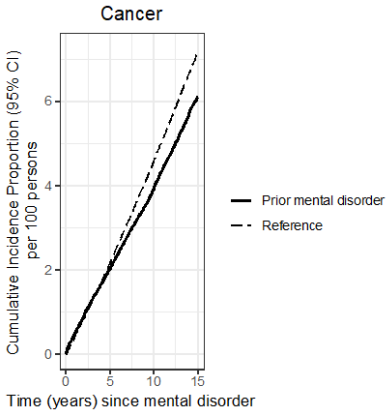
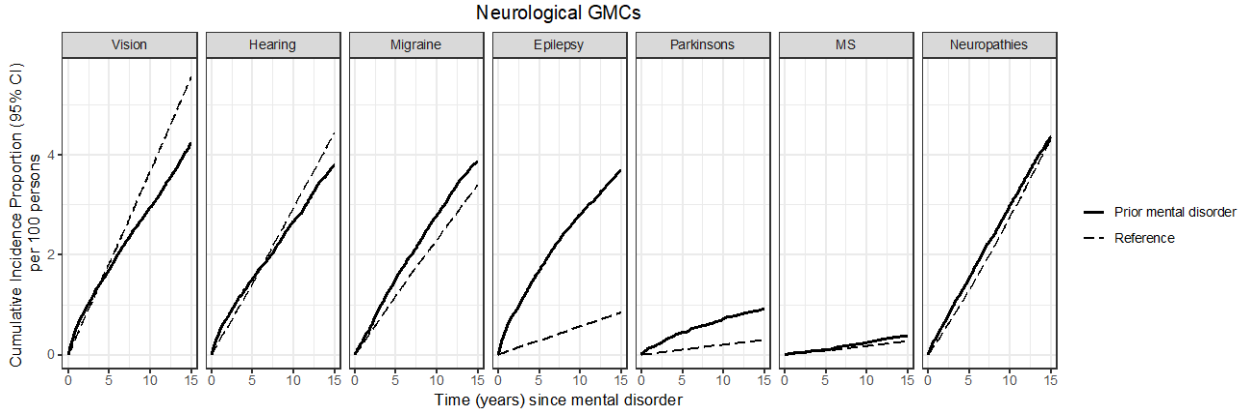


Figure S105.9 – Neurological Conditions



Figures S106.1-S106.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Mood Disorders

Figure S106.1 – Circulatory Conditions

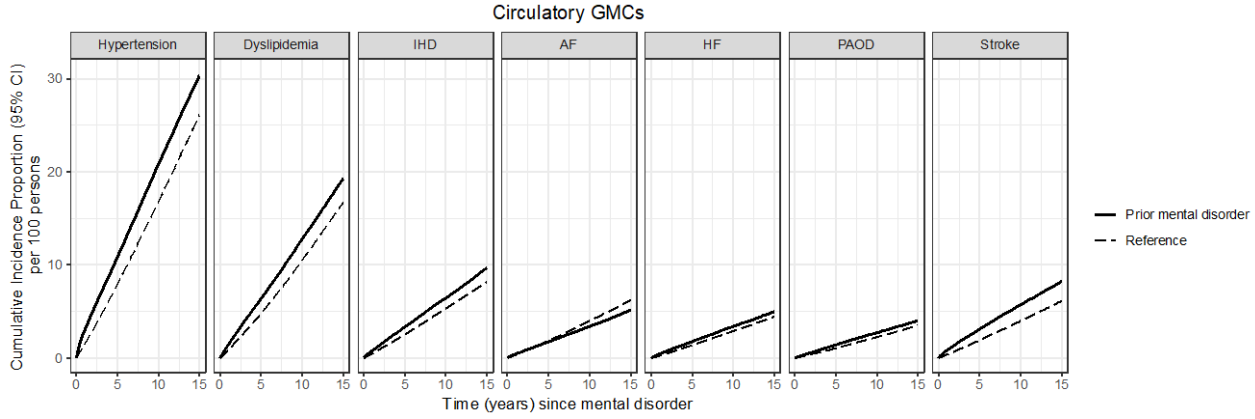


Figure S106.2 – Endocrine Conditions

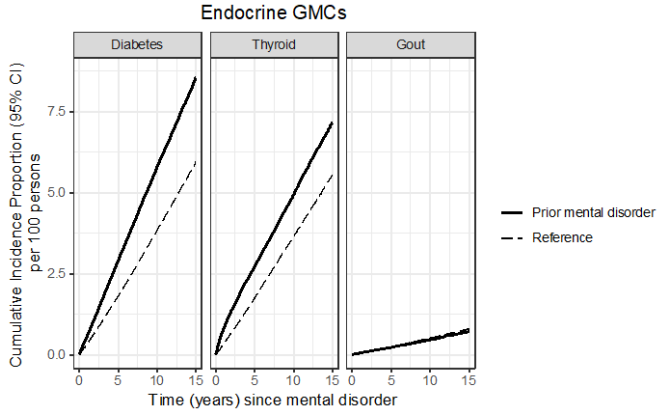


Figure S106.3 – Pulmonary Conditions

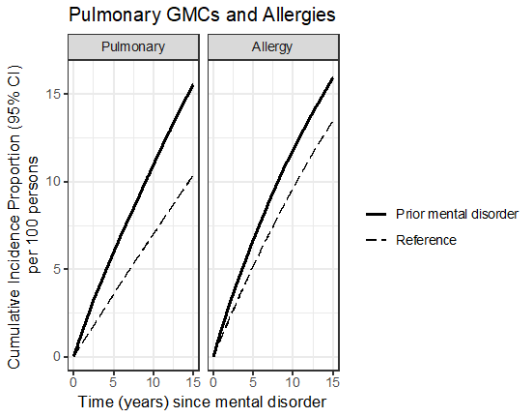


Figure S106.4 – Gastrointestinal Conditions

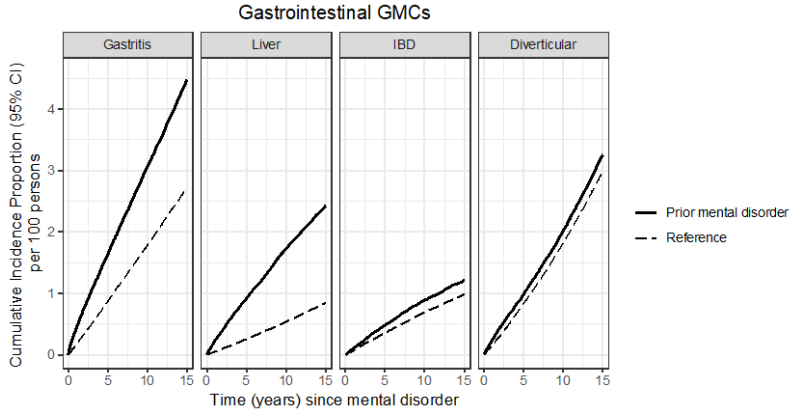


Figure S106.5 – Urogenital Conditions

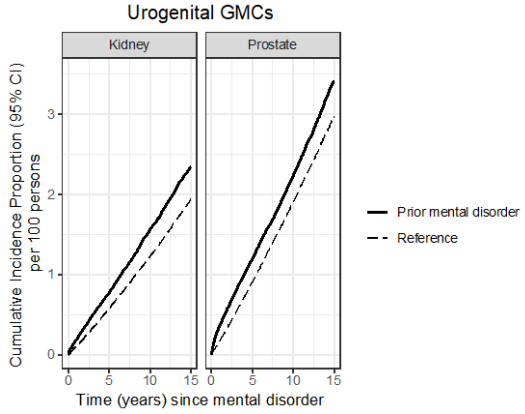


Figure S106.6 – Musculoskeletal Conditions

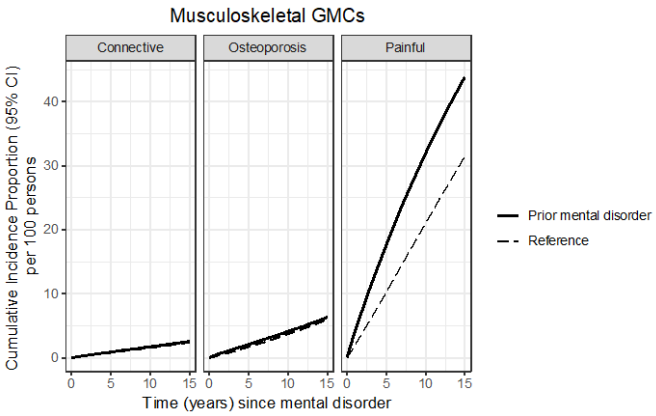


Figure S106.7 – Hematological Conditions

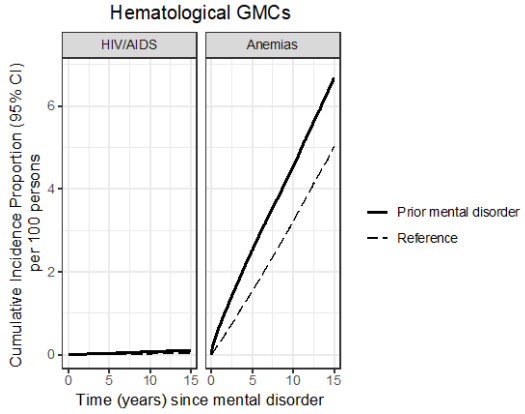


Figure S106.8 – Cancers

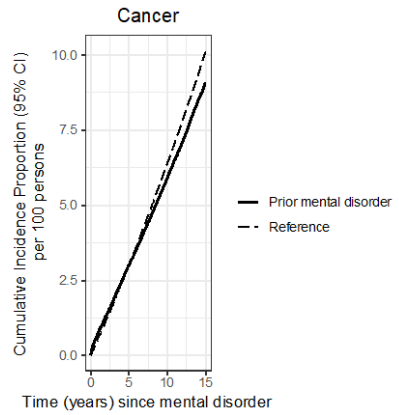
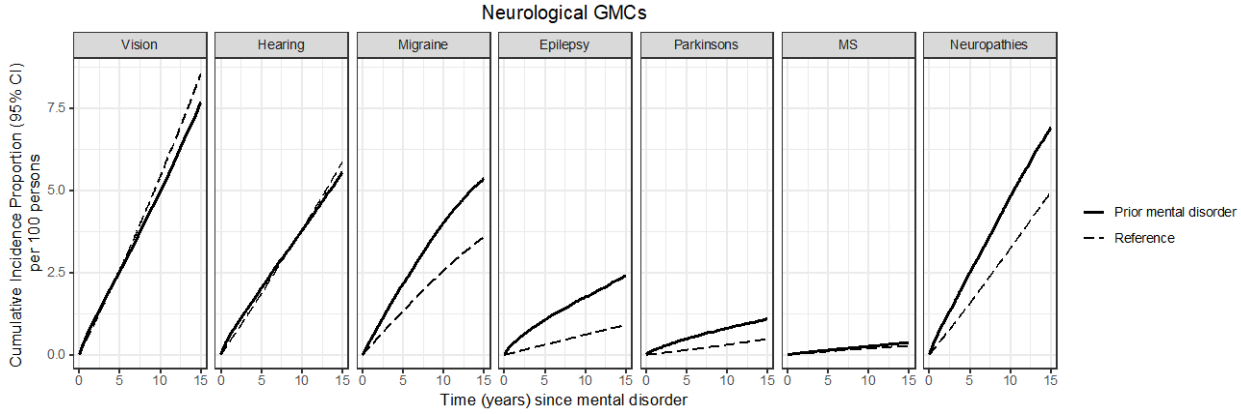


Figure S106.9 – Neurological Conditions



Figures S107.1-S107.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Neurotic Disorders

Figure S107.1 – Circulatory Conditions

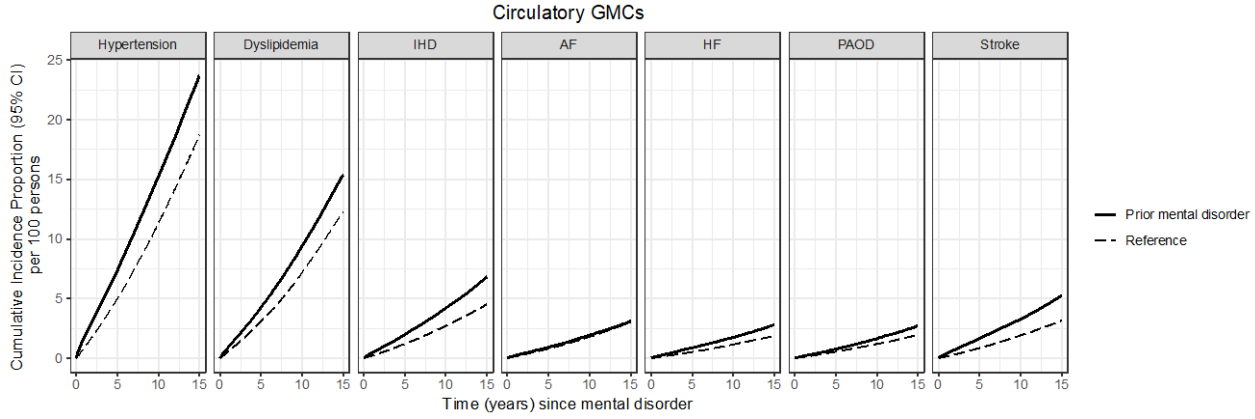


Figure S107.2 – Endocrine Conditions

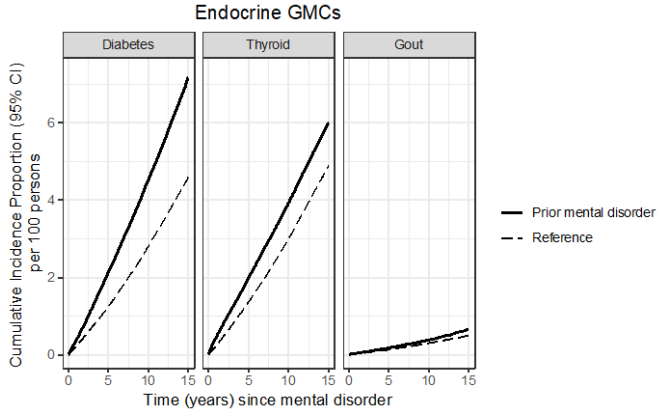


Figure S107.3 – Pulmonary Conditions

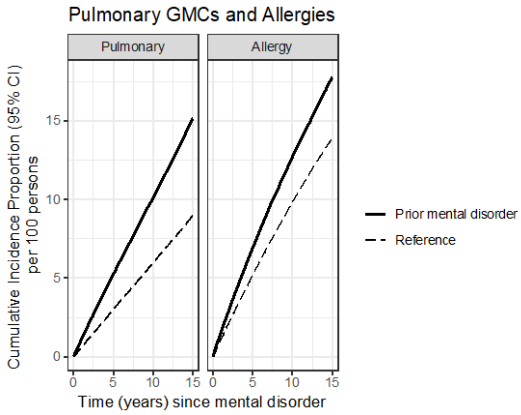


Figure S107.4 – Gastrointestinal Conditions

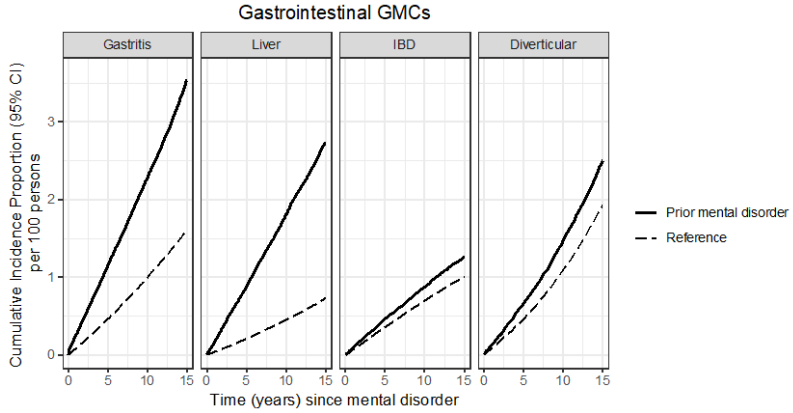


Figure S107.5 – Urogenital Conditions

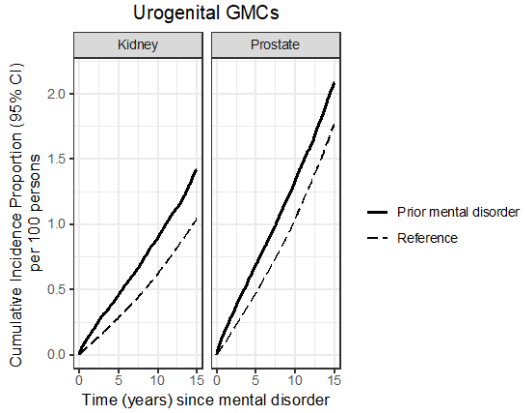


Figure S107.6– Musculoskeletal Conditions

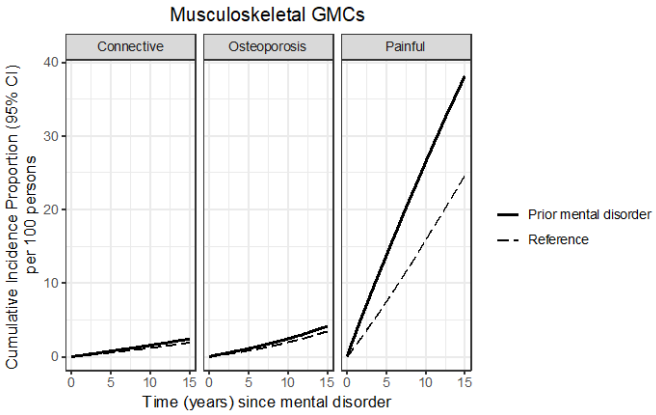


Figure S107.7 – Hematological Conditions

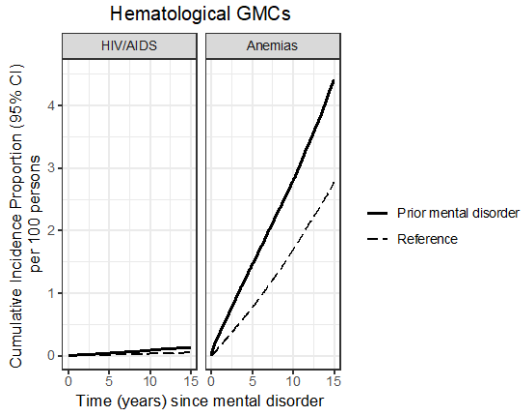


Figure S107.8 – Cancers

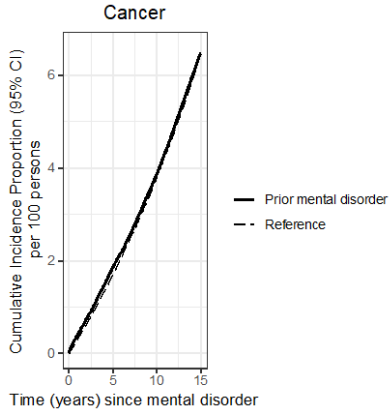
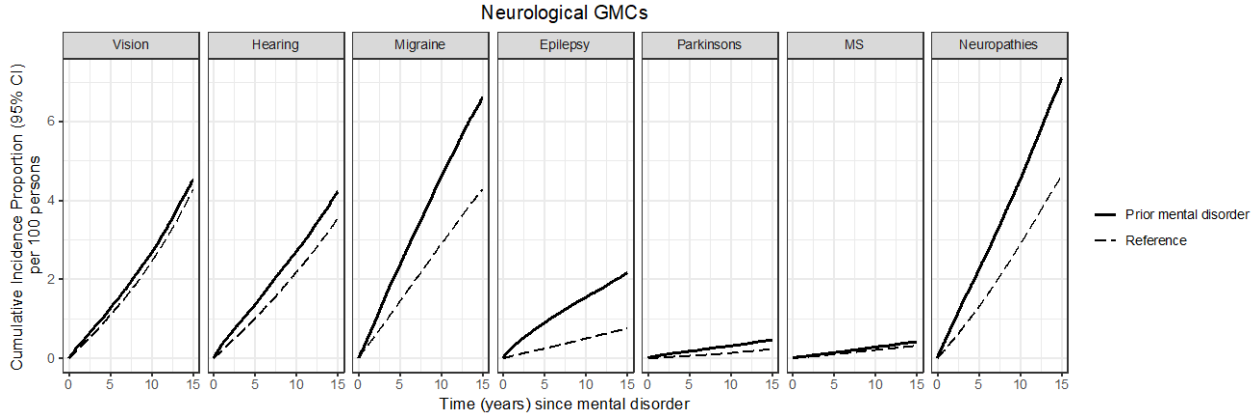


Figure S107.9 – Neurological Conditions



Figures S108.1-S108.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Eating Disorders

Figure S108.1 – Circulatory Conditions

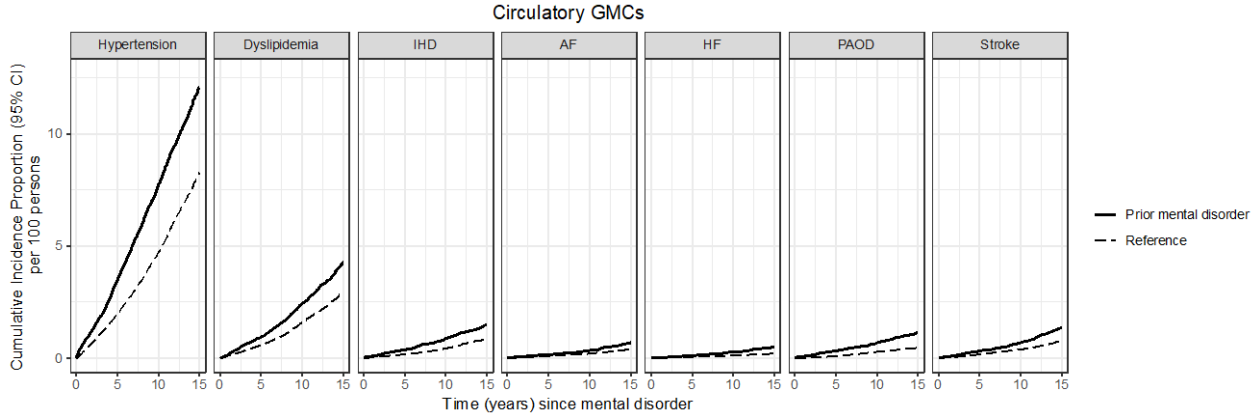


Figure S108.2 – Endocrine Conditions

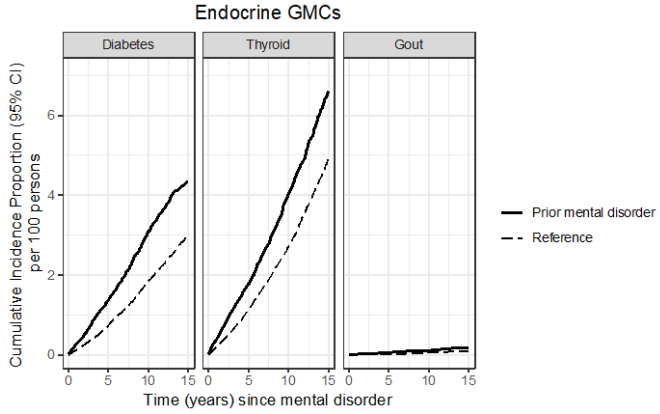


Figure S108.3 – Pulmonary Conditions

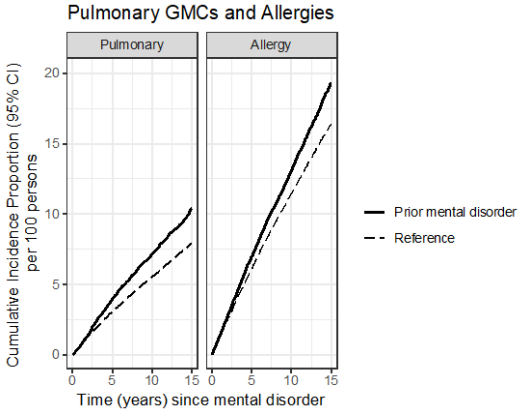


Figure S108.4 – Gastrointestinal Conditions

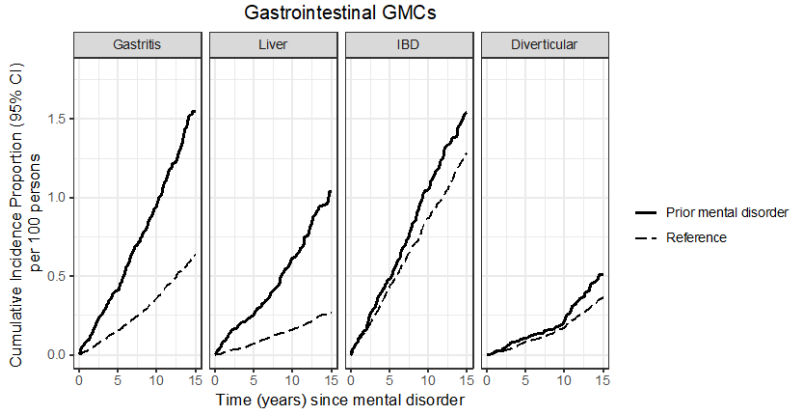


Figure S108.5 – Urogenital Conditions

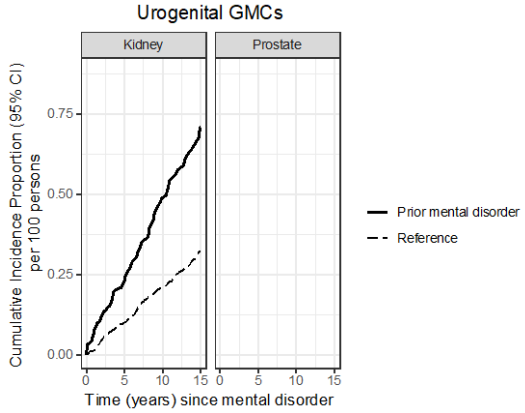


Figure S108.6 – Musculoskeletal Conditions

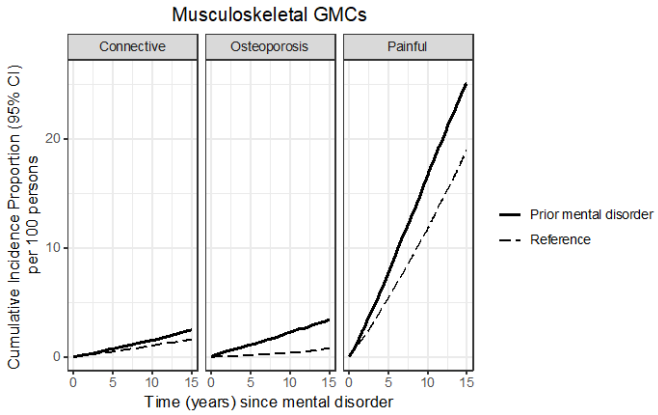


Figure S108.7 – Hematological Conditions

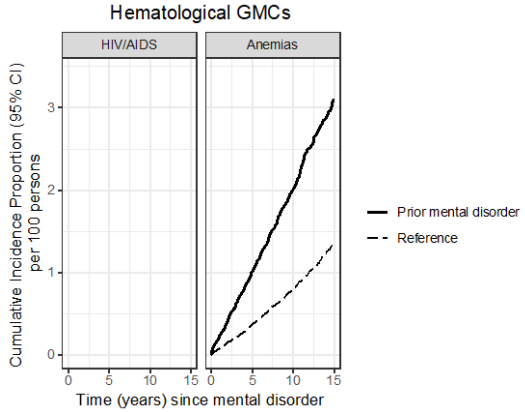


Figure S108.8 – Cancers

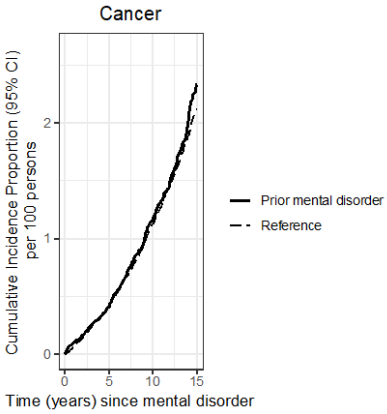
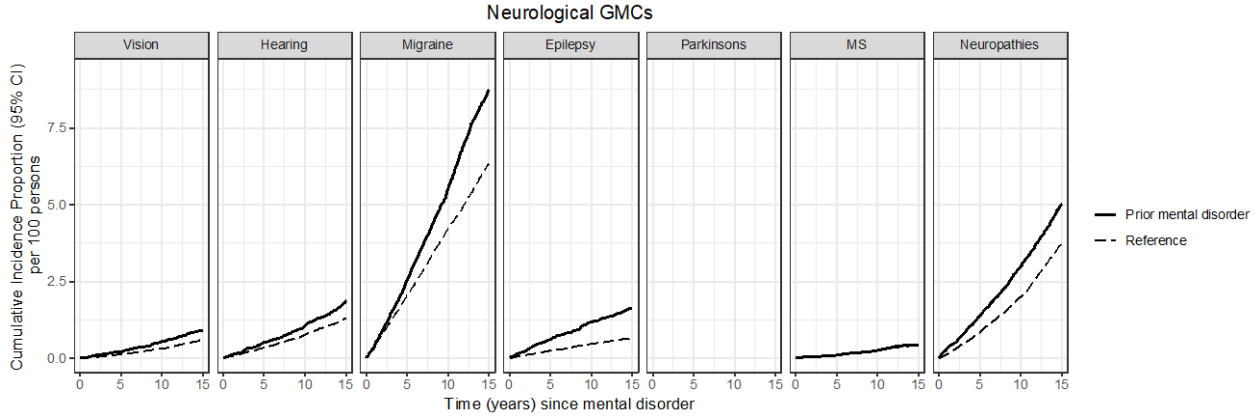


Figure S108.9 – Neurological Conditions



Figures S109.1-S109.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Personality Disorders

Figure S109.1 – Circulatory Conditions

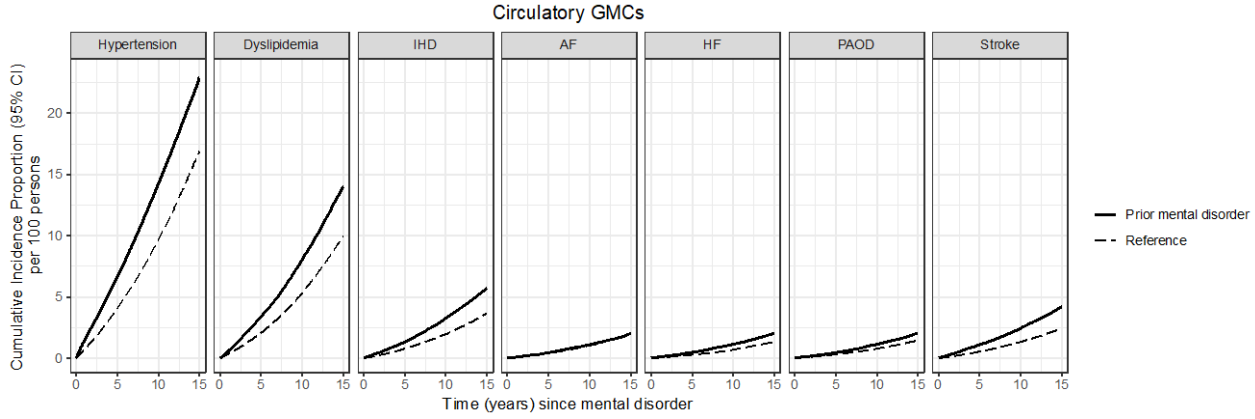


Figure S109.2 – Endocrine Conditions

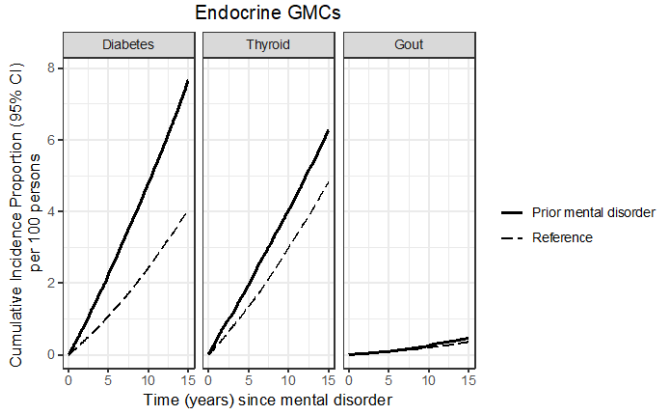


Figure S109.3 – Pulmonary Conditions

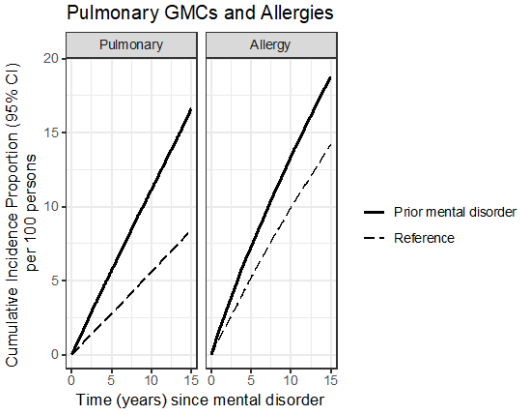


Figure S109.4 – Gastrointestinal Conditions

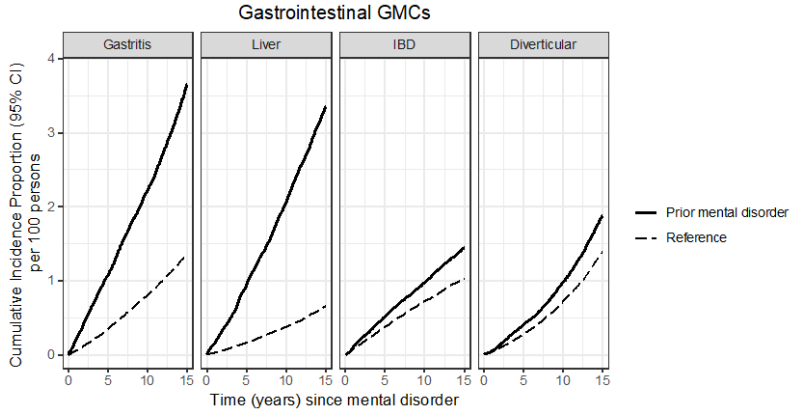


Figure S109.5 – Urogenital Conditions

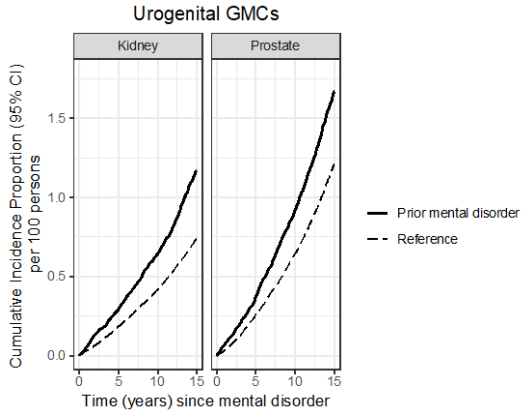


Figure S109.6 – Musculoskeletal Conditions

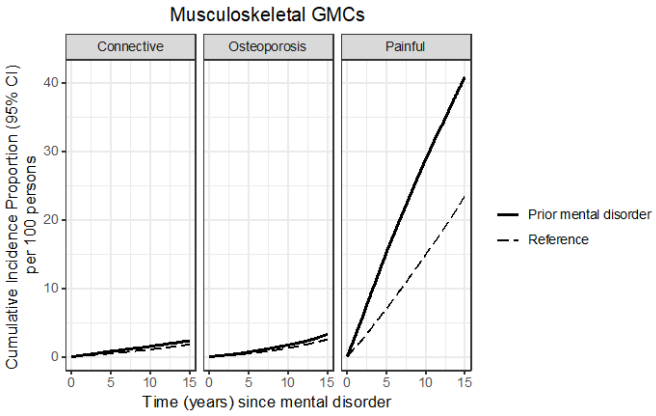


Figure S109.7 – Hematological Conditions

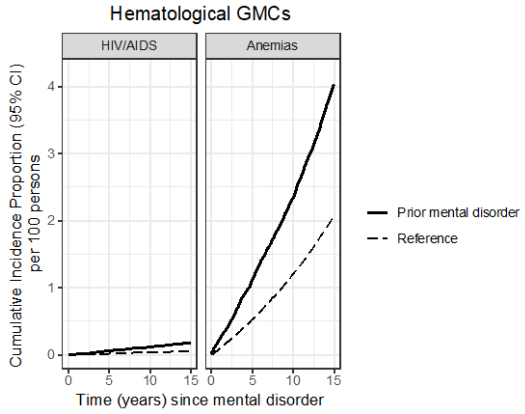


Figure S109.8 – Cancers

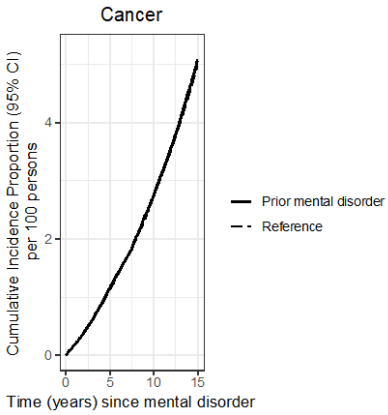
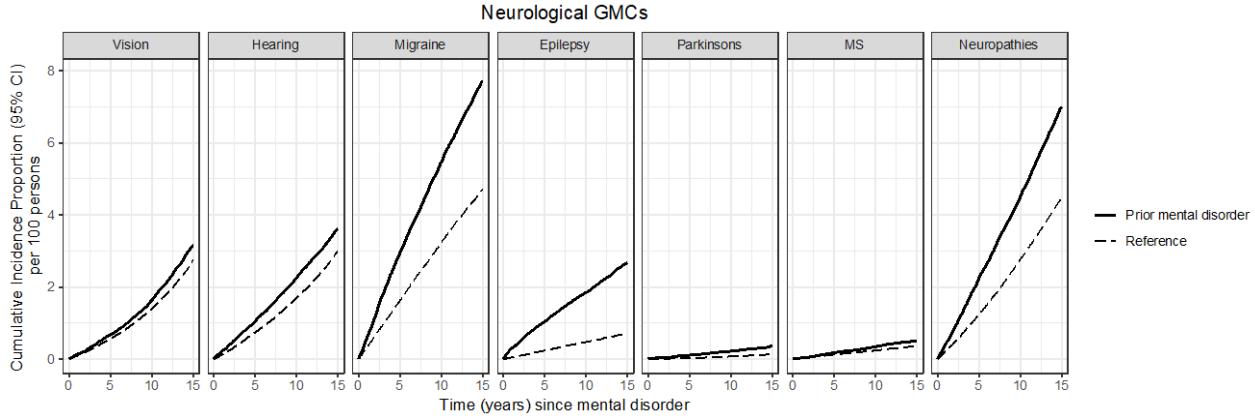


Figure S109.9 – Neurological Conditions



Figures S110.1-S110.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Intellectual Disabilities

Figure S110.1 – Circulatory Conditions

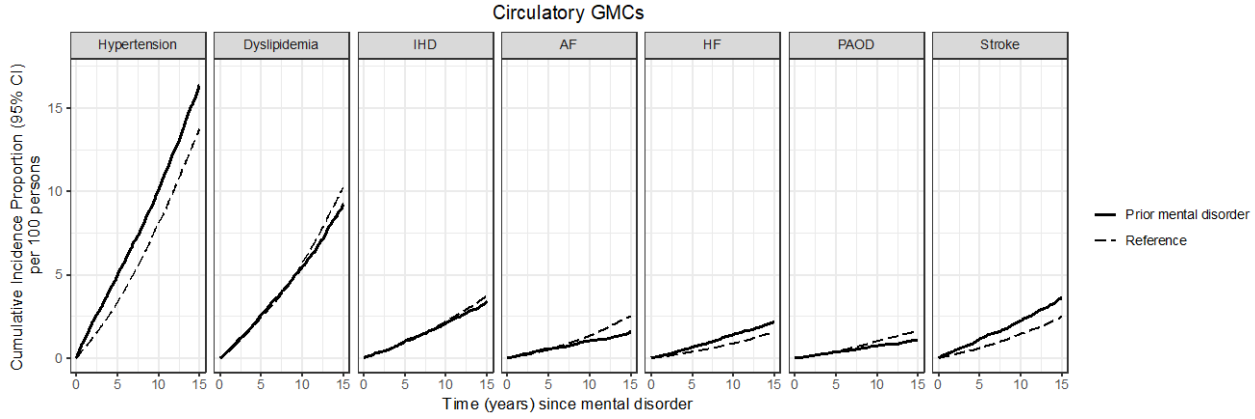


Figure S110.2 – Endocrine Conditions

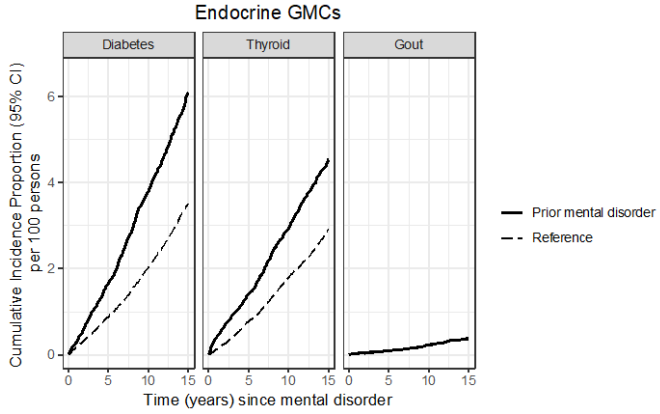


Figure S110.3 – Pulmonary Conditions

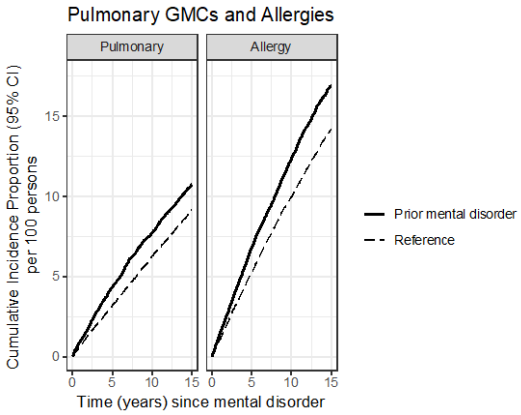


Figure S110.4 – Gastrointestinal Conditions

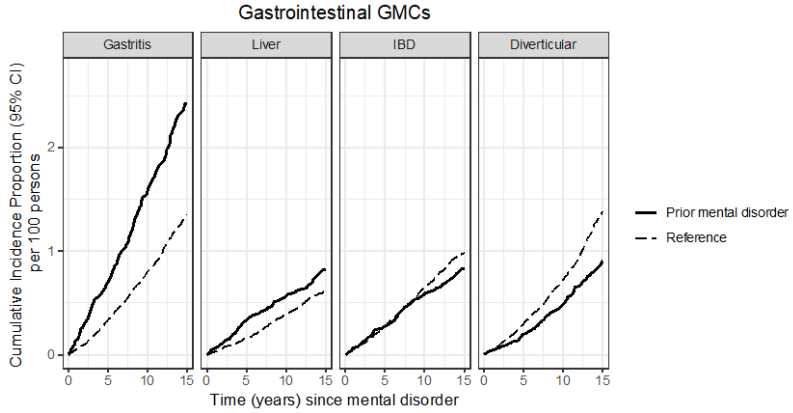


Figure S110.5 – Urogenital Conditions

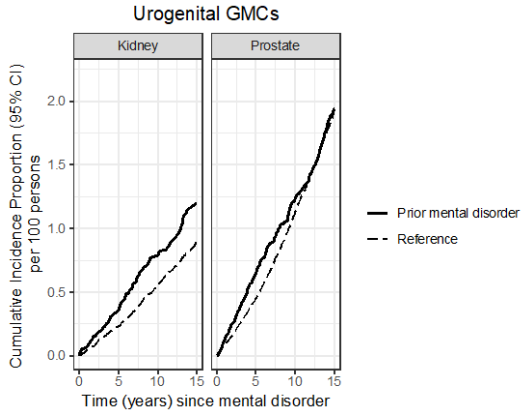


Figure S110.6 – Musculoskeletal Conditions

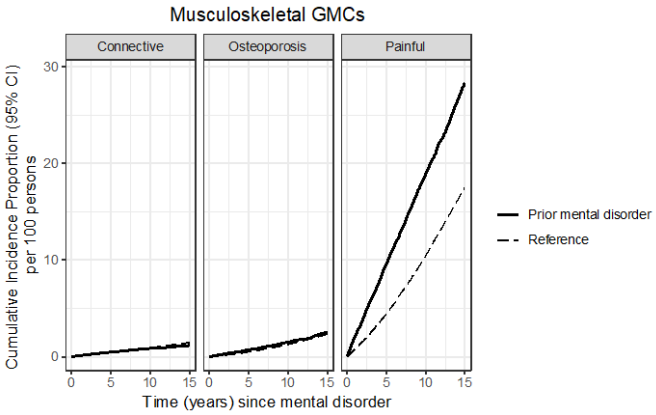


Figure S110.7 – Hematological Conditions

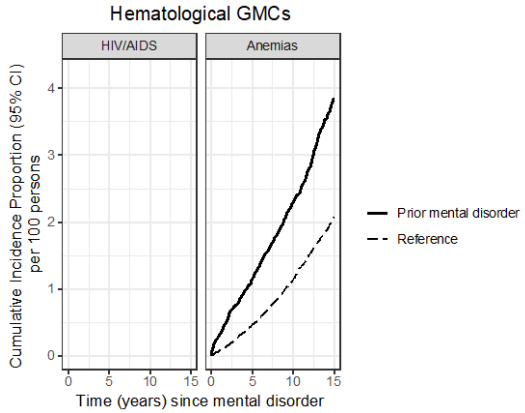


Figure S110.8 – Cancers

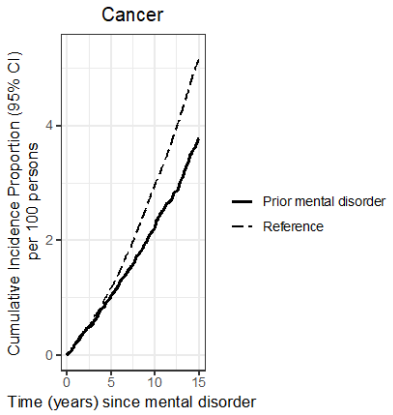
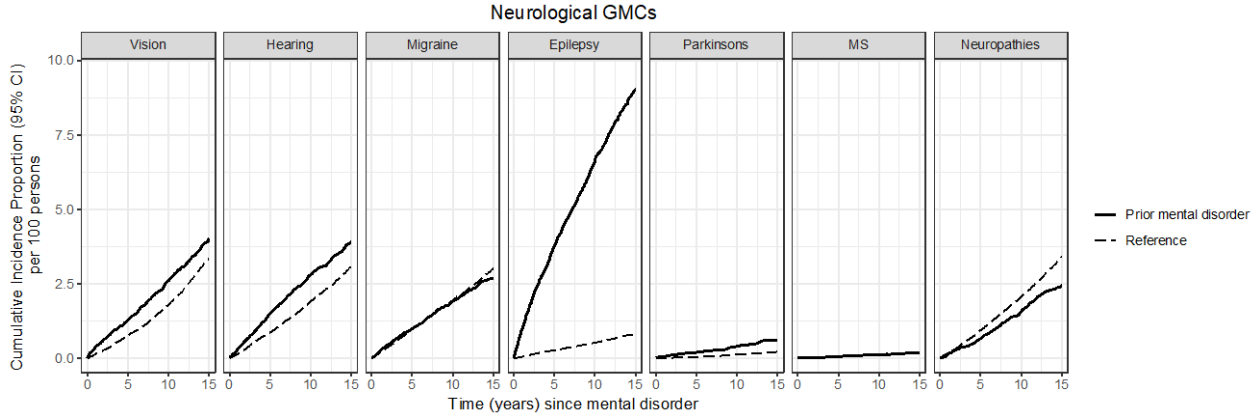


Figure S110.9 – Neurological Conditions



Figures S111.1-S111.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Developmental Disorders

Figure S111.1 – Circulatory Conditions

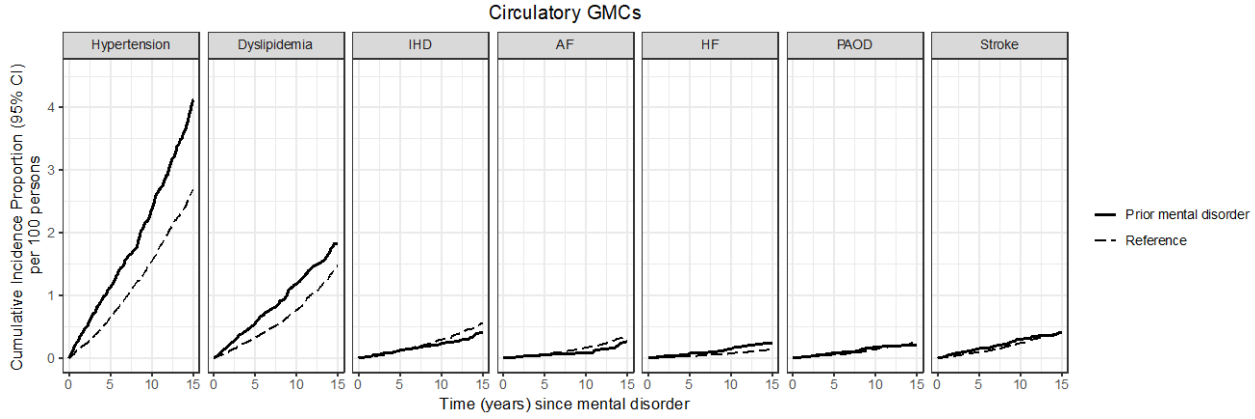


Figure S111.2 – Endocrine Conditions

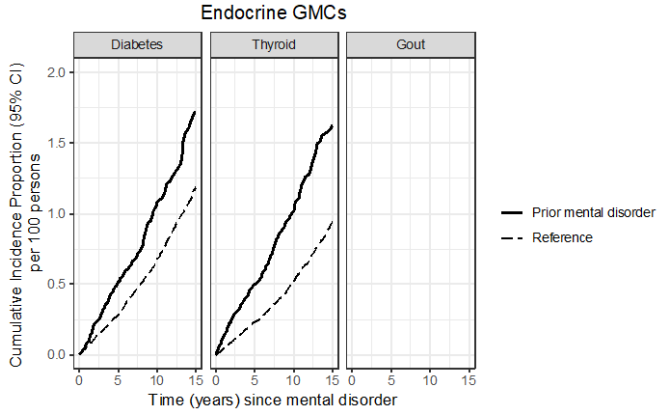


Figure S111.3 – Pulmonary Conditions

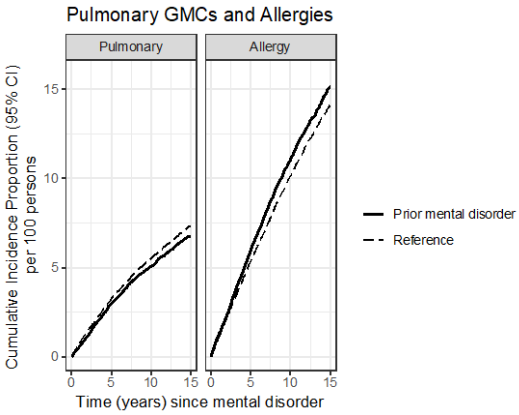


Figure S111.4 – Gastrointestinal Conditions

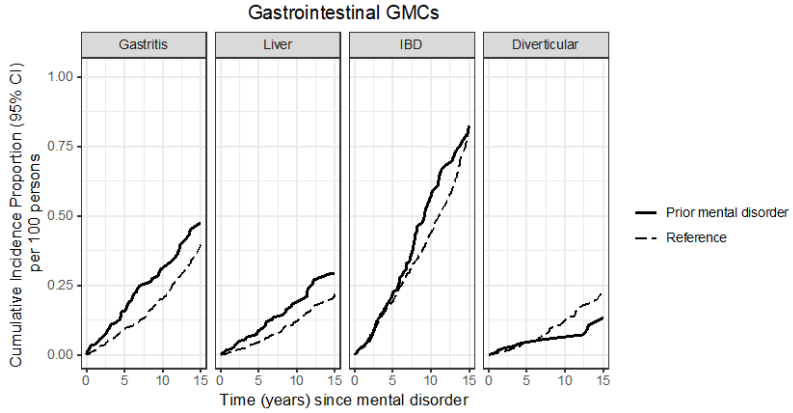


Figure S111.5 – Urogenital Conditions

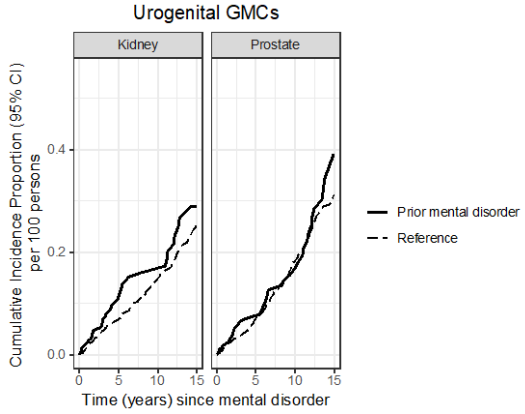


Figure S111.6 – Musculoskeletal Conditions

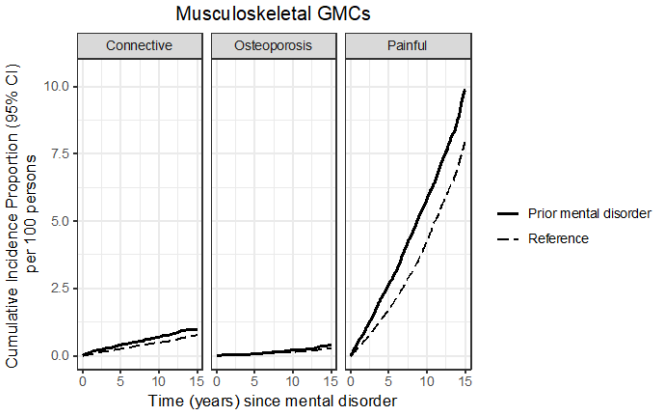


Figure S111.7 – Hematological Conditions

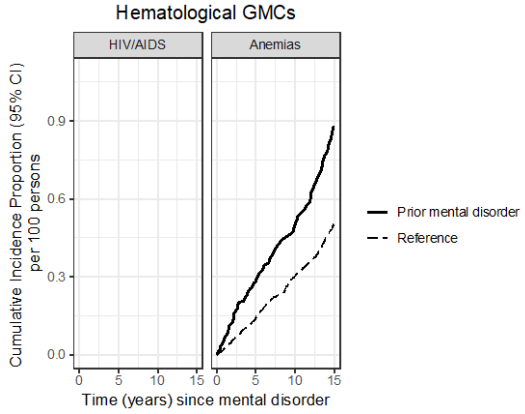


Figure S111.8 – Cancers

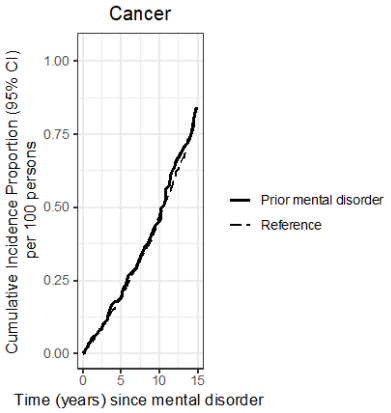
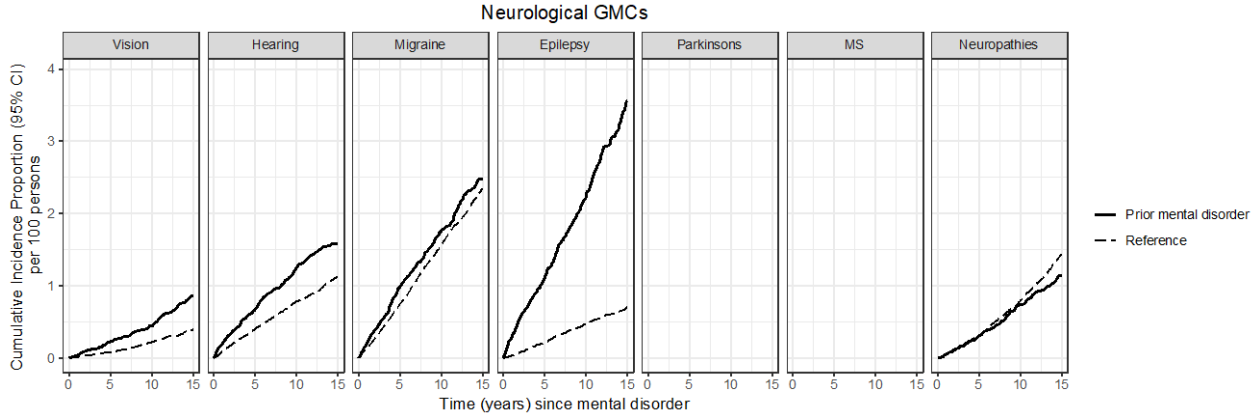


Figure S111.9 – Neurological Conditions



Figures S112.1-S112.9. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Behavioral Disorders

Figure S112.1 – Circulatory Conditions

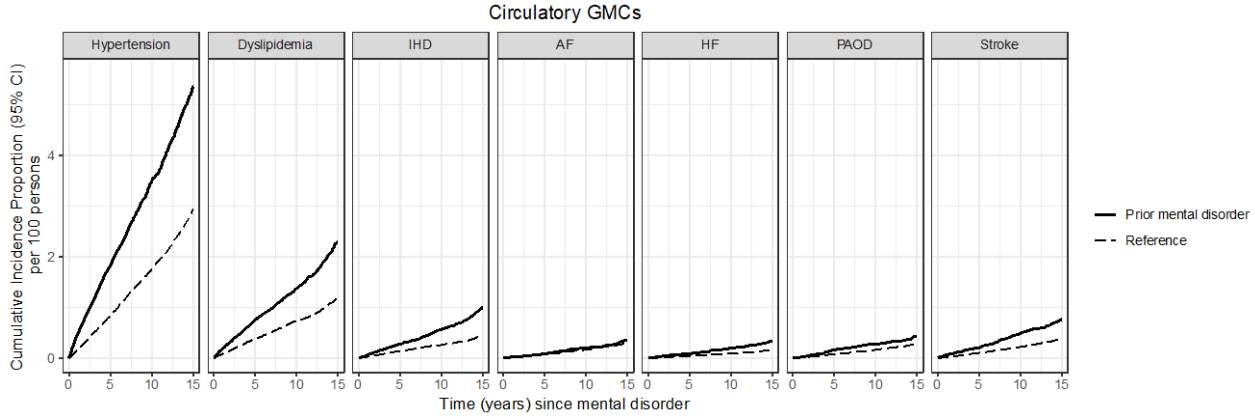


Figure S112.2 – Endocrine Conditions

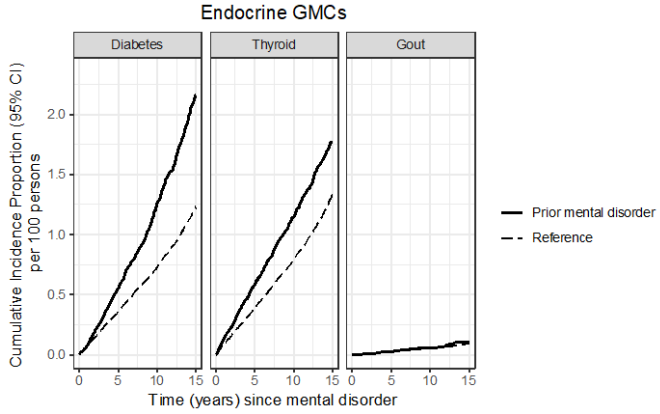


Figure S112.3 – Pulmonary Conditions

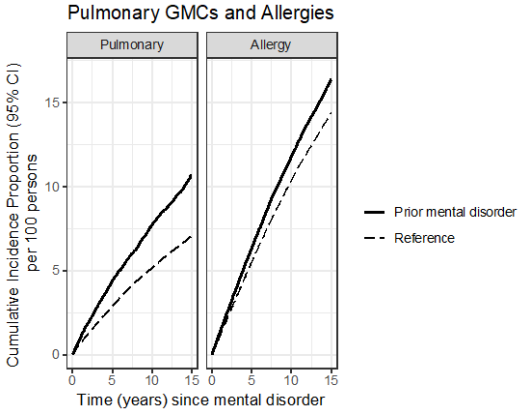


Figure S112.4 – Gastrointestinal Conditions

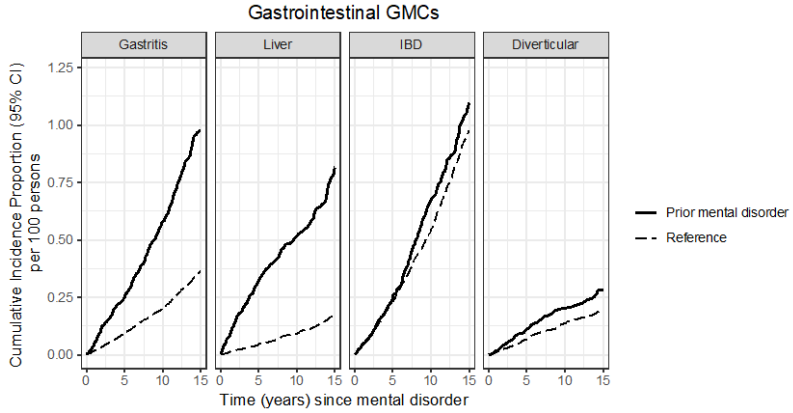


Figure S112.5 – Urogenital Conditions

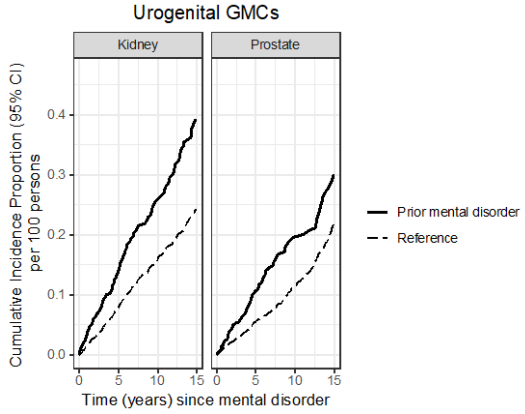


Figure S112.6 – Musculoskeletal Conditions

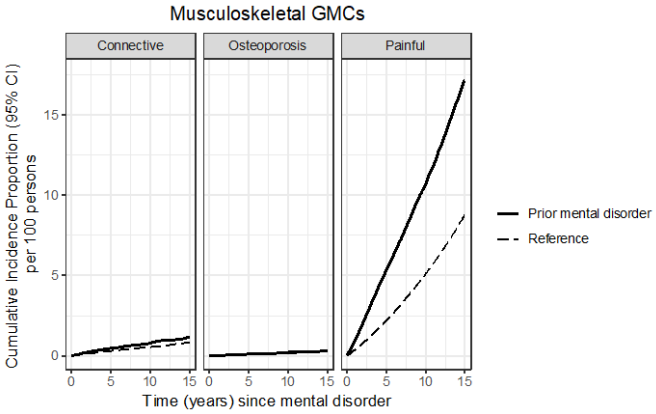


Figure S112.7 – Hematological Conditions

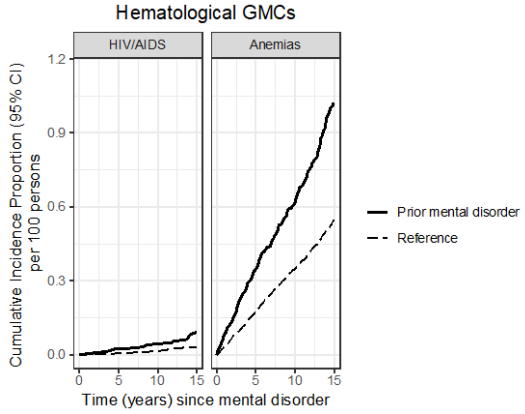


Figure S112.8 – Cancers

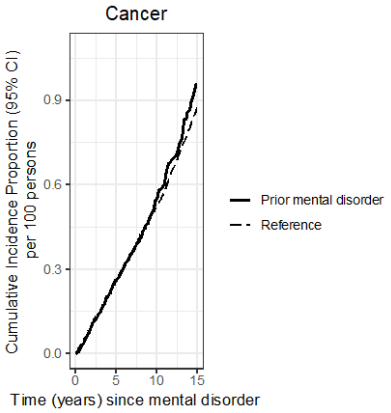
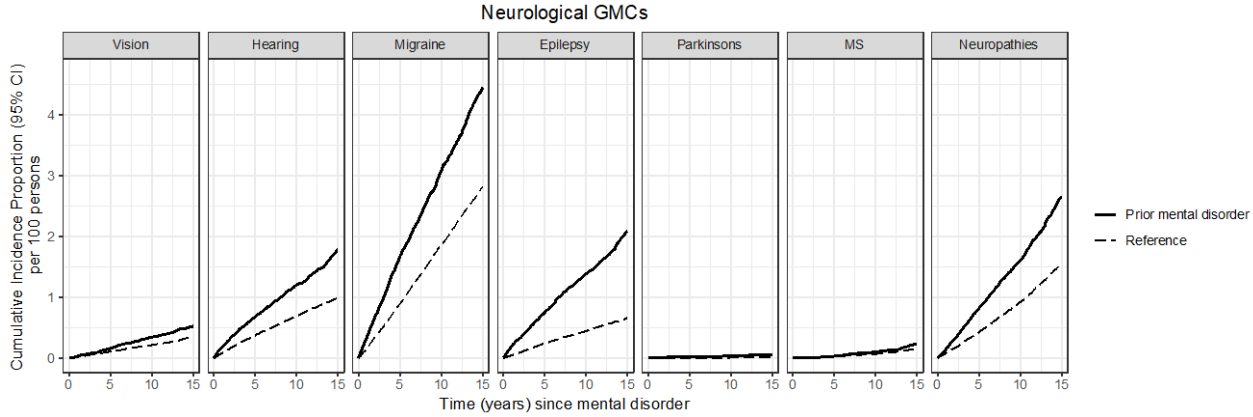


Figure S112.9 – Neurological Conditions



Figures S113.1-S113.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Organic Disorders

Figure S113.1 – Circulatory Conditions

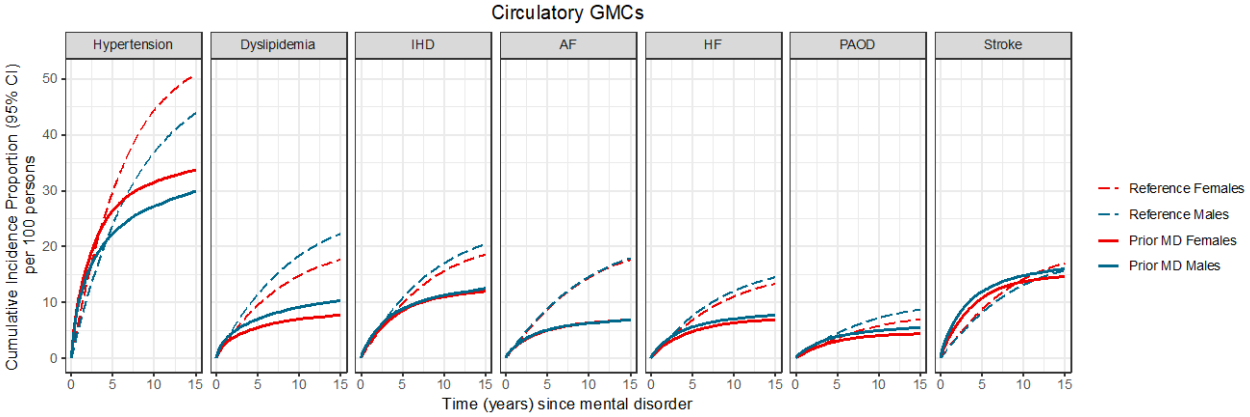


Figure S113.2 – Endocrine Conditions

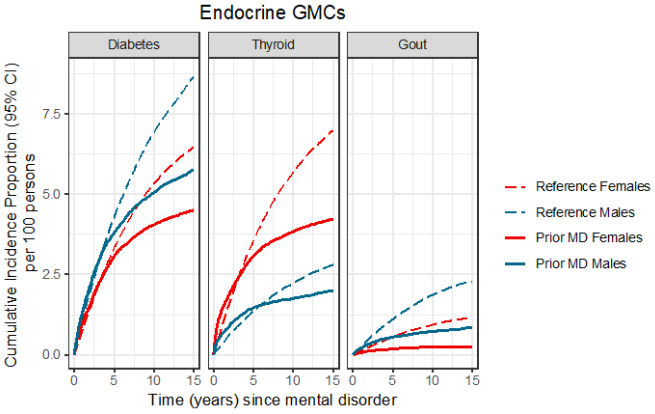


Figure S113.3 – Pulmonary Conditions

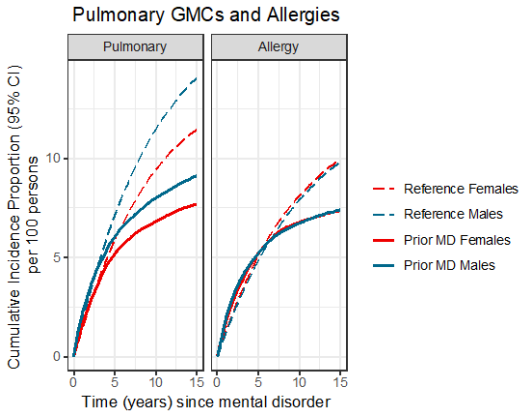


Figure S113.4 – Gastrointestinal Conditions

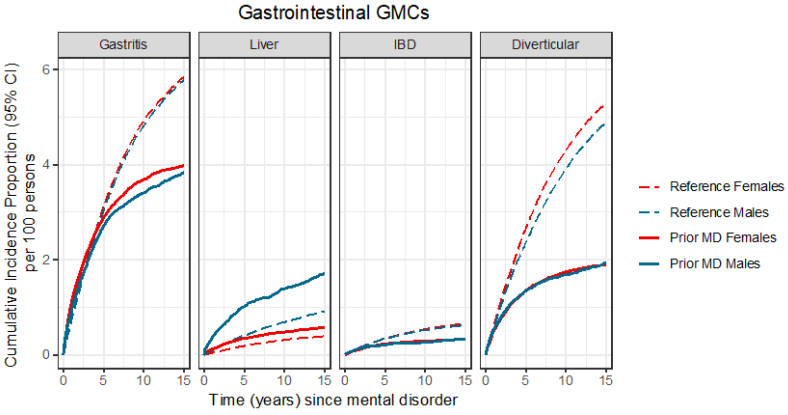


Figure S113.5 – Urogenital Conditions

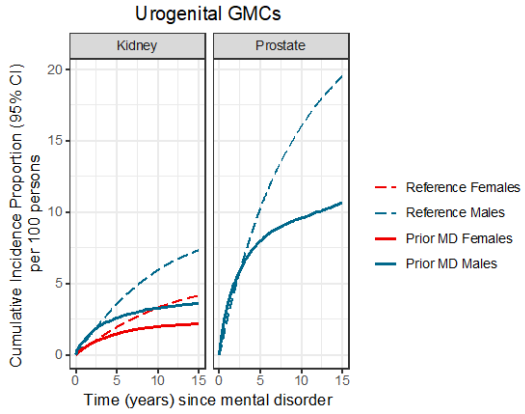


Figure S113.6 – Musculoskeletal Conditions

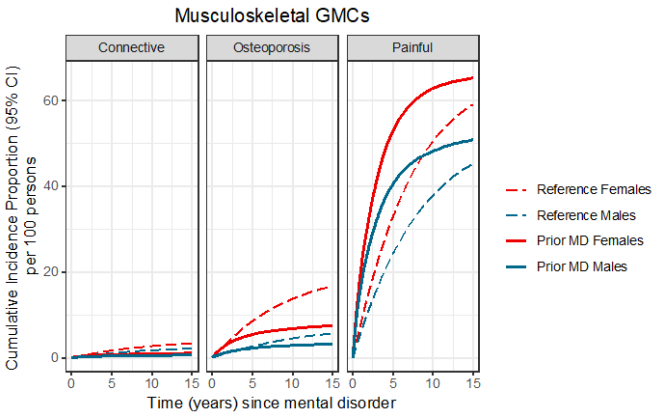


Figure S113.7 – Hematological Conditions

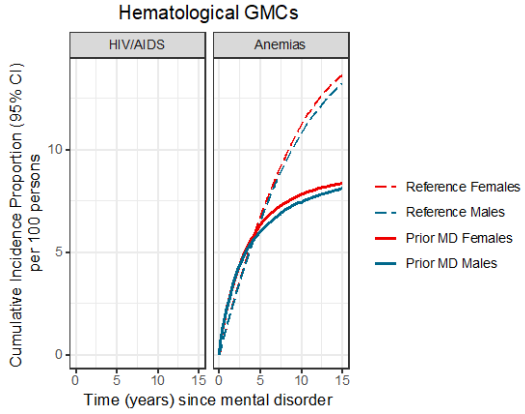


Figure S113.8 – Cancers

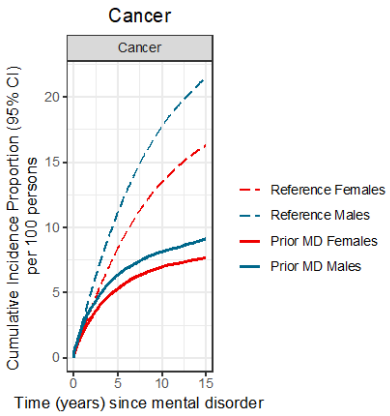
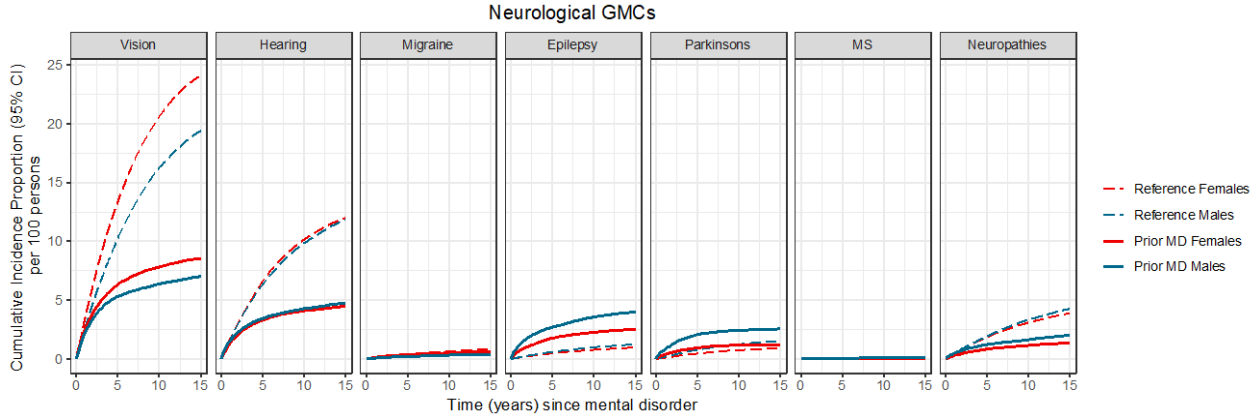


Figure S113.9 – Neurological Conditions



Figures S104.1-S104.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Substance Use Disorders

Figure S114.1 – Circulatory Conditions

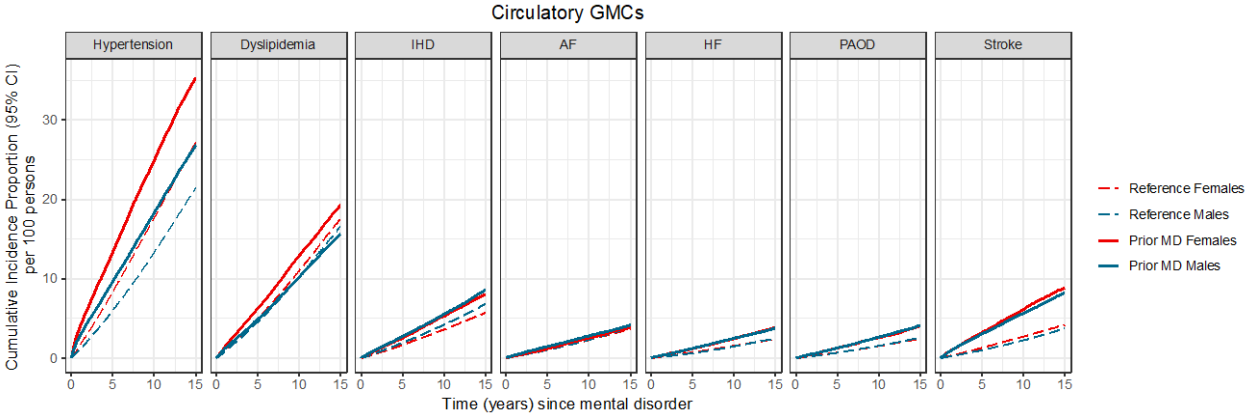


Figure S114.2 – Endocrine Conditions

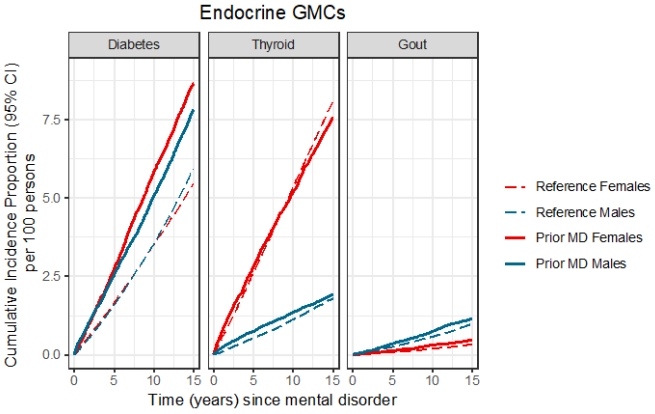


Figure S114.3 – Pulmonary Conditions

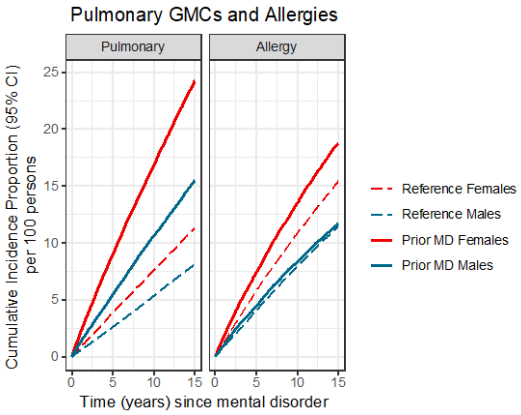


Figure S114.4 – Gastrointestinal Conditions

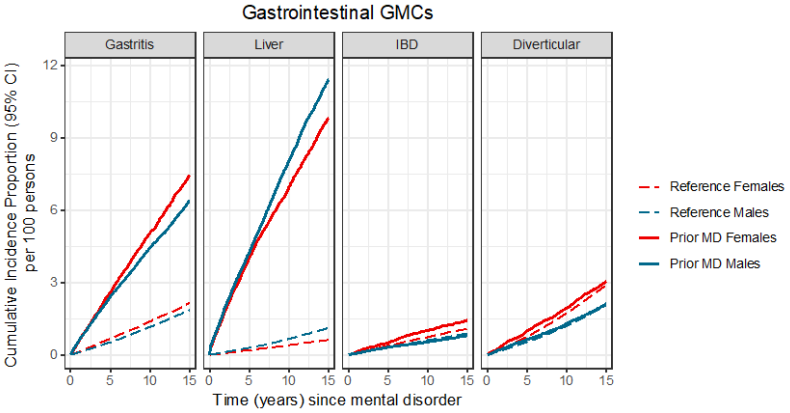


Figure S114.5 – Urogenital Conditions

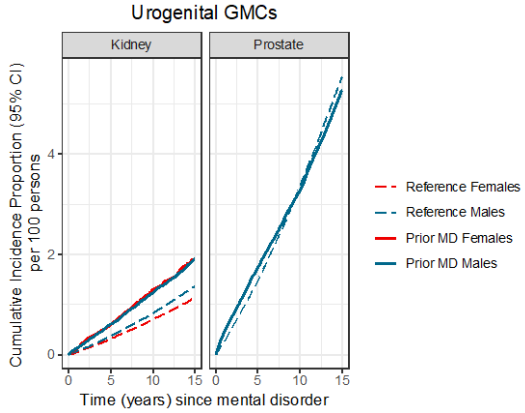


Figure S114.6 – Musculoskeletal Conditions

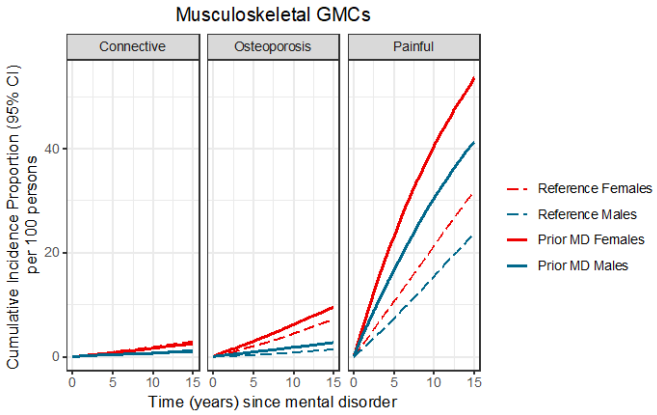


Figure S114.7 – Hematological Conditions

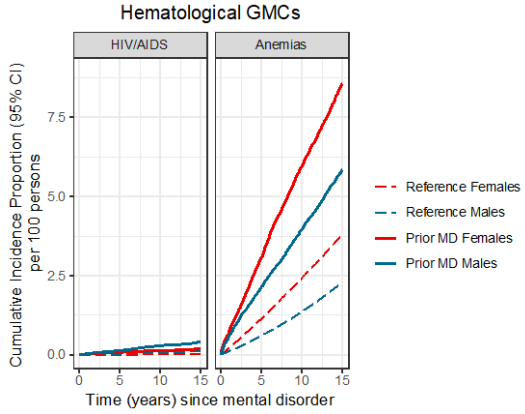


Figure S114.8 – Cancers

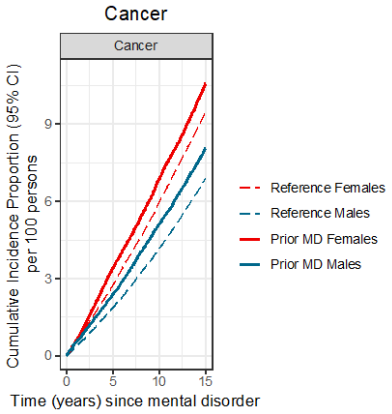
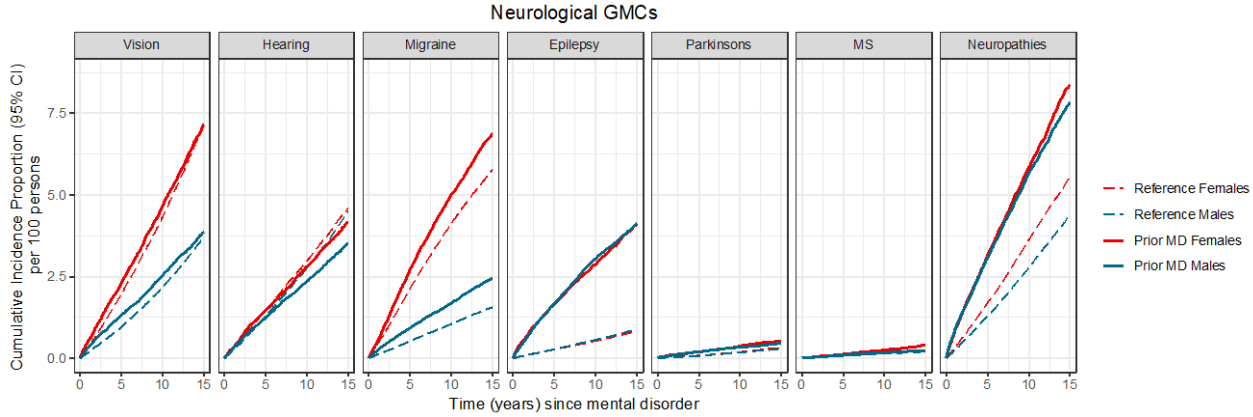


Figure S114.9 – Neurological Conditions



Figures S115.1-S115.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Schizophrenia

Figure S115.1 – Circulatory Conditions

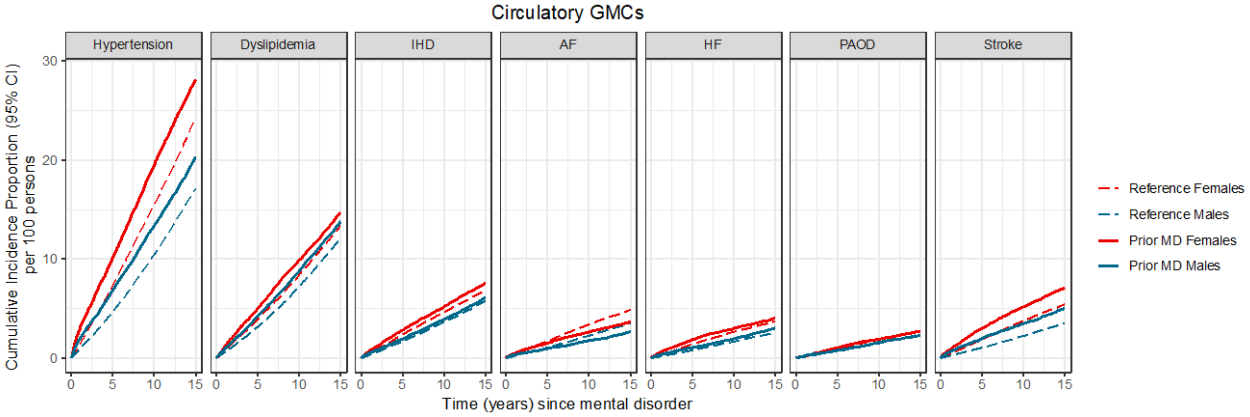


Figure S115.2 – Endocrine Conditions

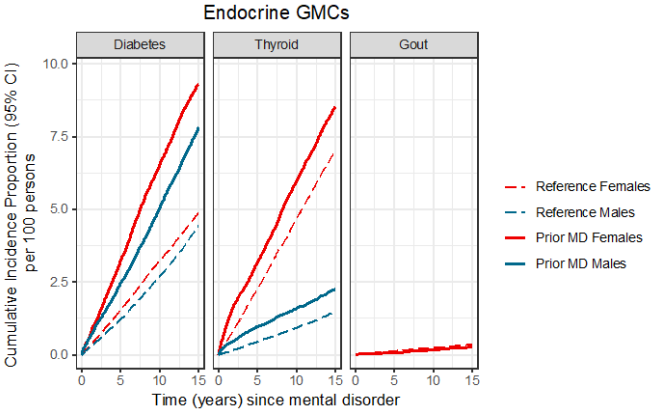


Figure S115.3 – Pulmonary Conditions

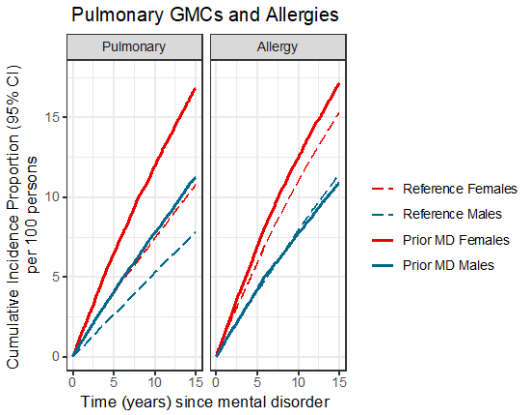


Figure S115.4 – Gastrointestinal Conditions

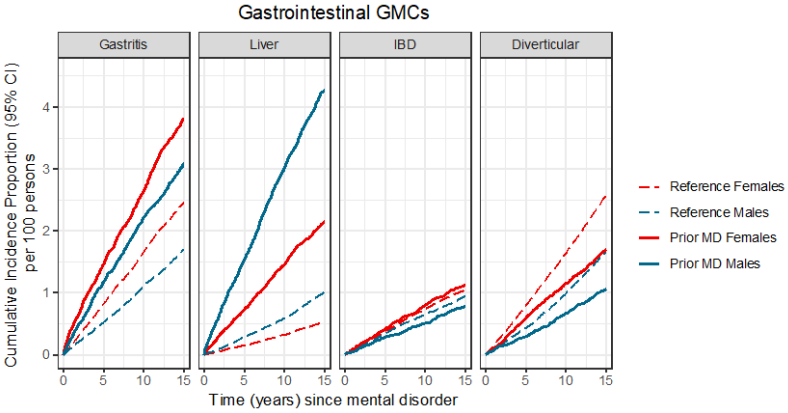


Figure S115.5 – Urogenital Conditions

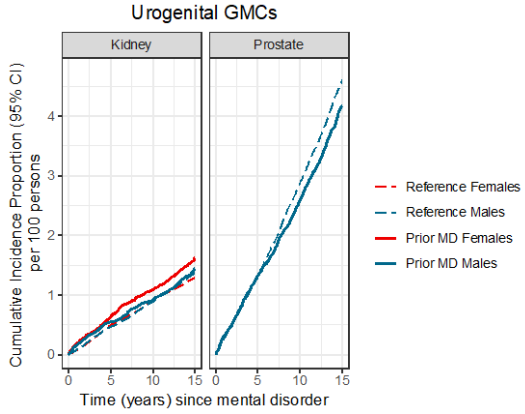


Figure S115.6 – Musculoskeletal Conditions

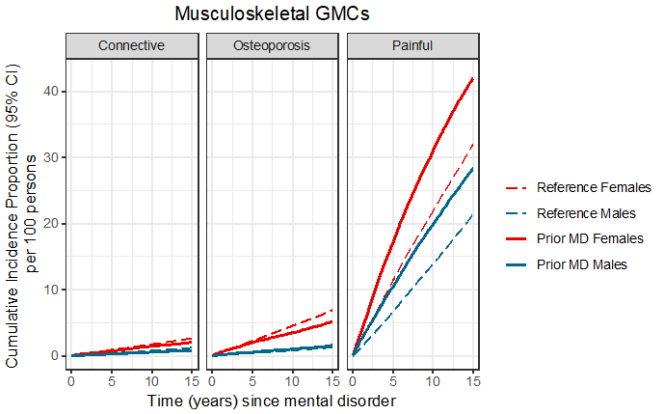


Figure S115.7 – Hematological Conditions

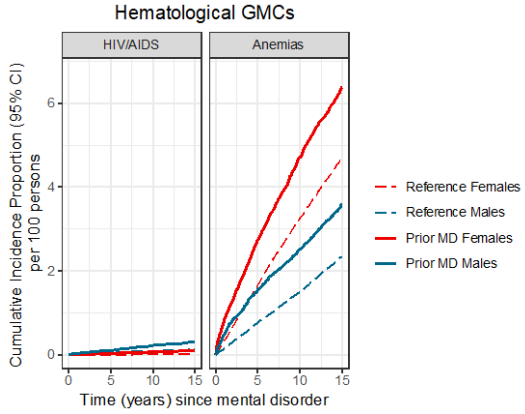


Figure S115.8 – Cancers

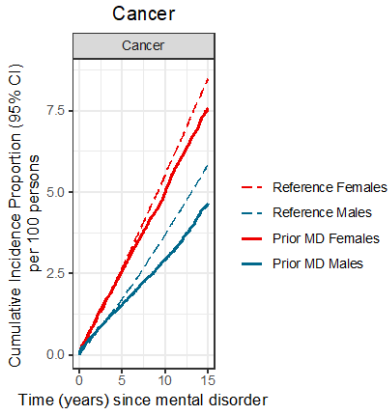
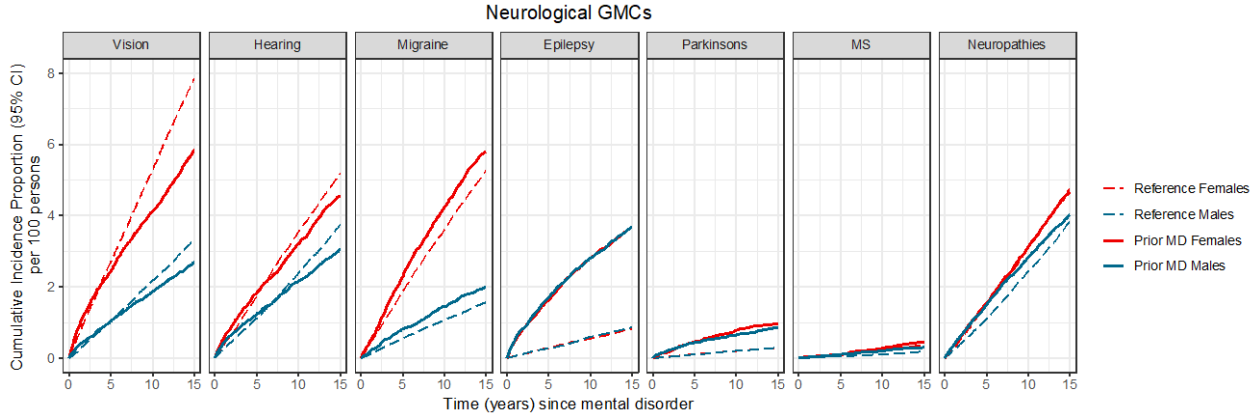


Figure S115.9 – Neurological Conditions



Figures S116.1-S116.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Mood Disorders

Figure S116.1 – Circulatory Conditions

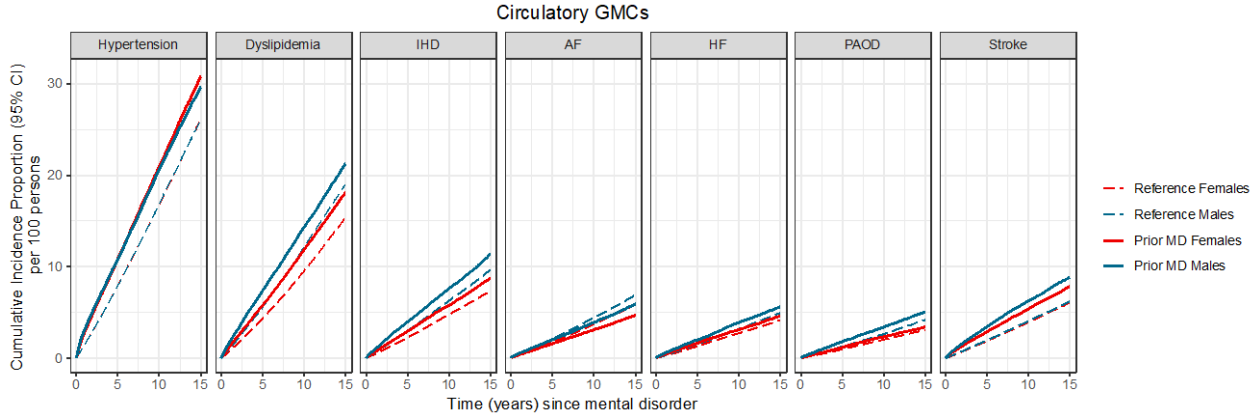


Figure S116.2 – Endocrine Conditions

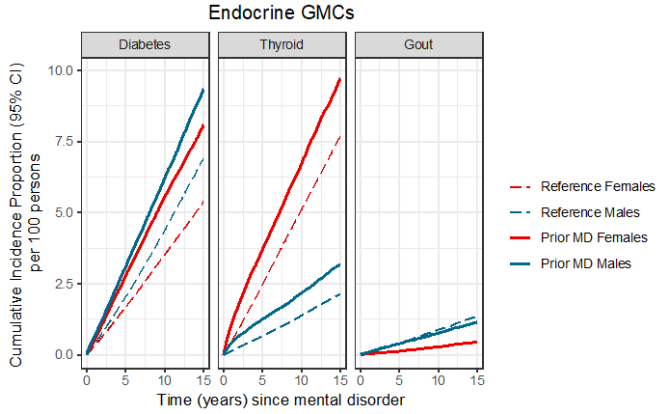


Figure S116.3 – Pulmonary Conditions

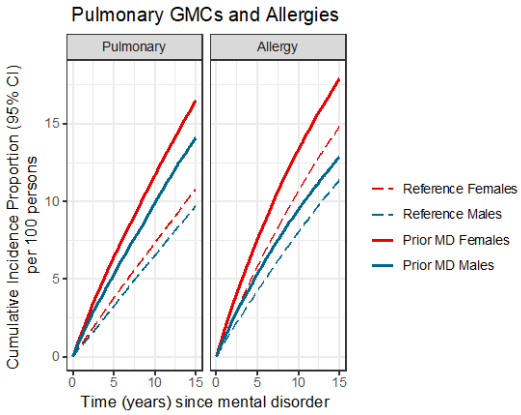


Figure S116.4 – Gastrointestinal Conditions

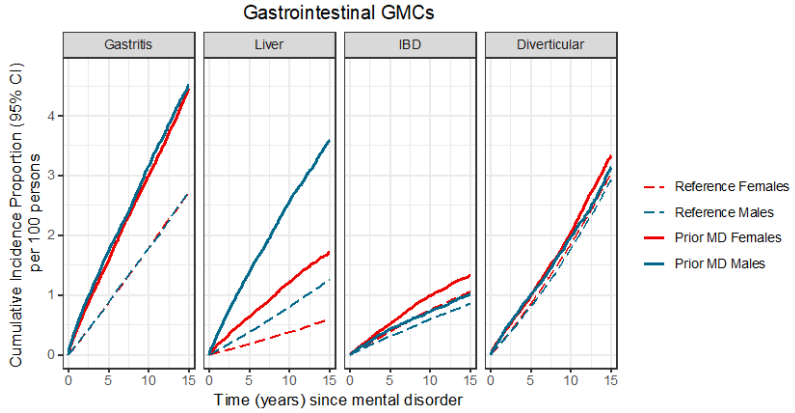


Figure S116.5 – Urogenital Conditions

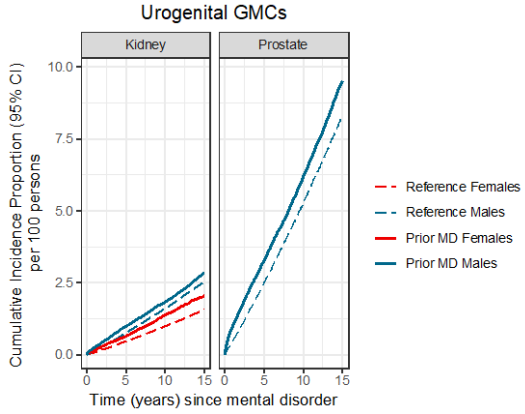


Figure S116.6 – Musculoskeletal Conditions

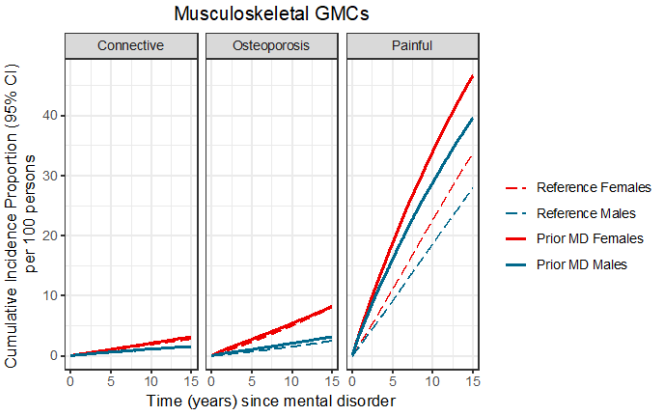


Figure S116.7 – Hematological Conditions

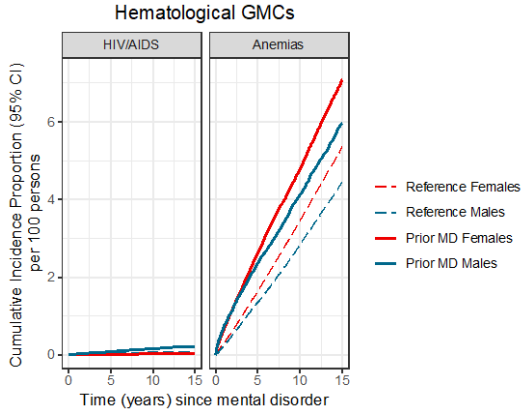


Figure S116.8 – Cancers

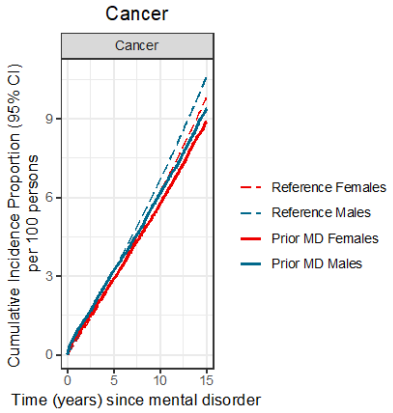
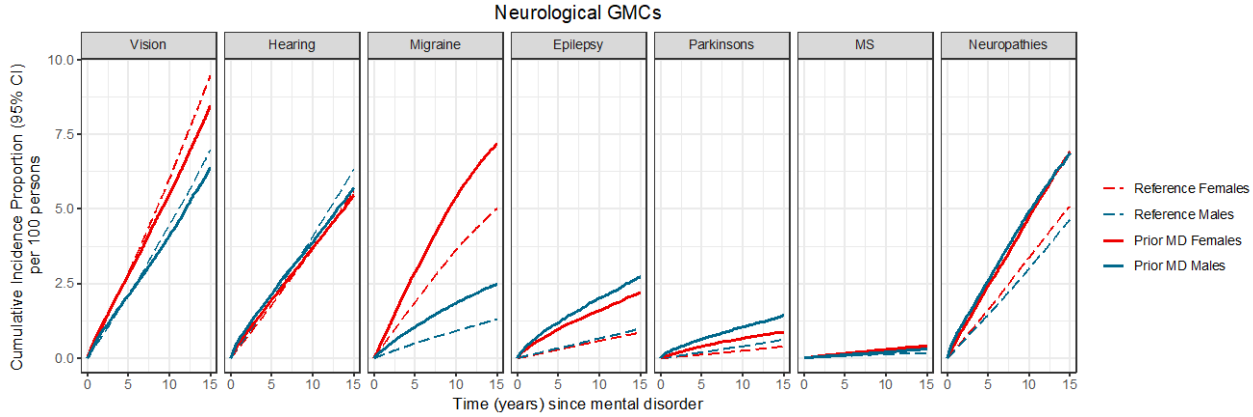


Figure S116.9 – Neurological Conditions



Figures S117.1-S117.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Neurotic Disorders

Figure S117.1 – Circulatory Conditions

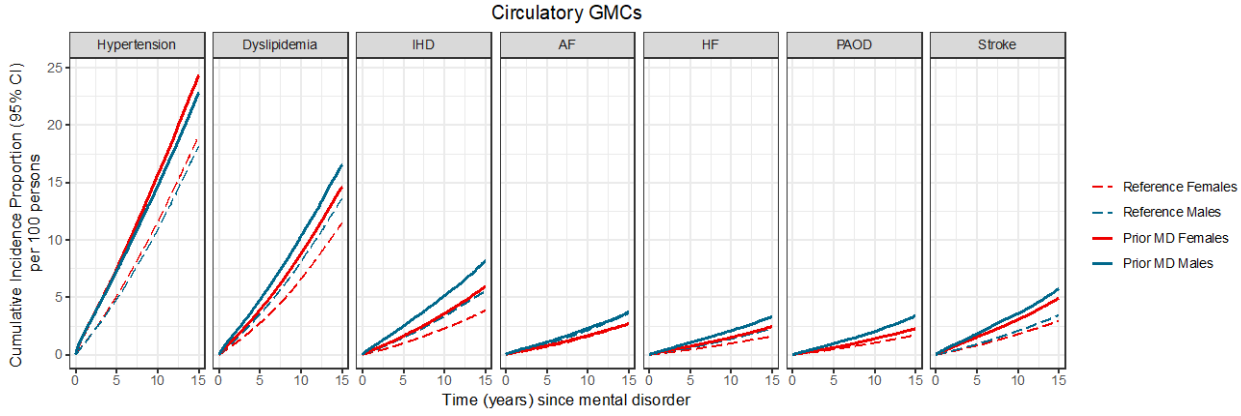


Figure S117.2 – Endocrine Conditions

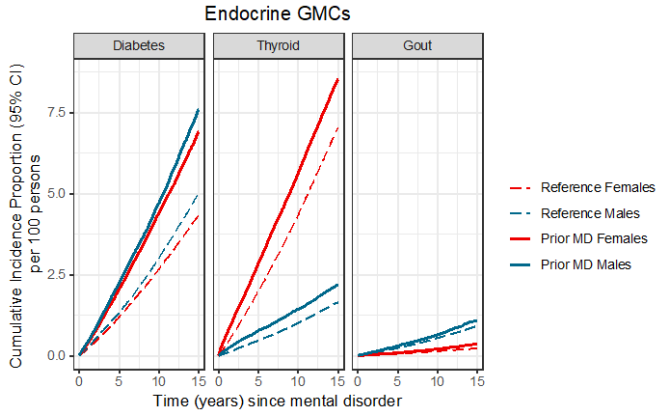


Figure S117.3 – Pulmonary Conditions

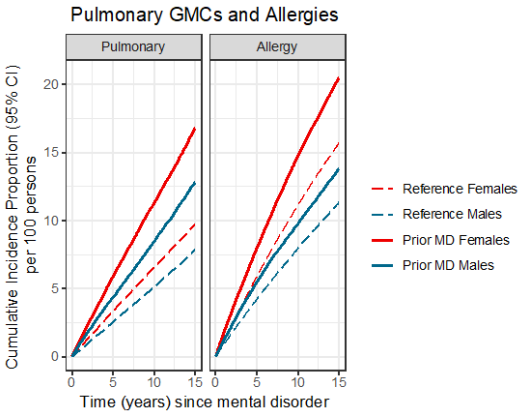


Figure S117.4 – Gastrointestinal Conditions

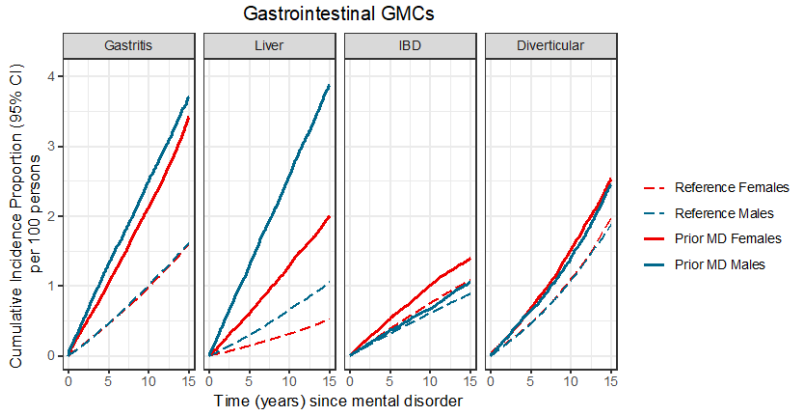


Figure S117.5 – Urogenital Conditions

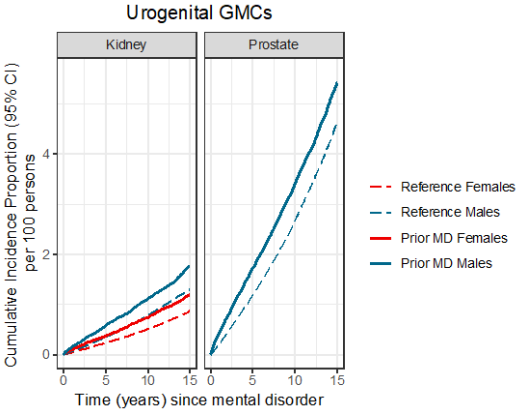


Figure S117.6 – Musculoskeletal Conditions

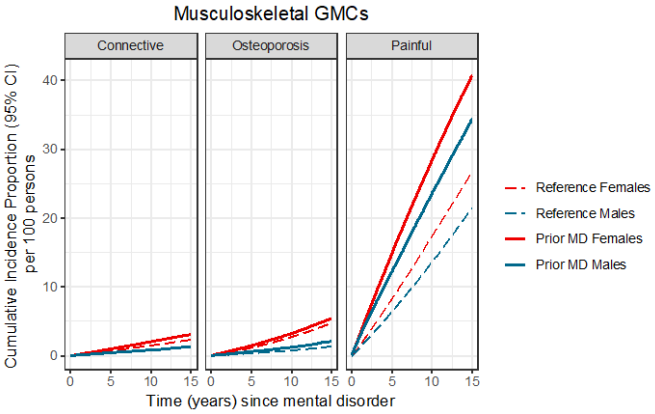


Figure S117.7 – Hematological Conditions

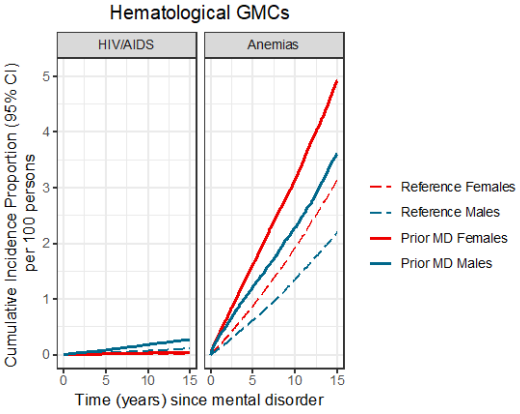


Figure S117.8 – Cancers

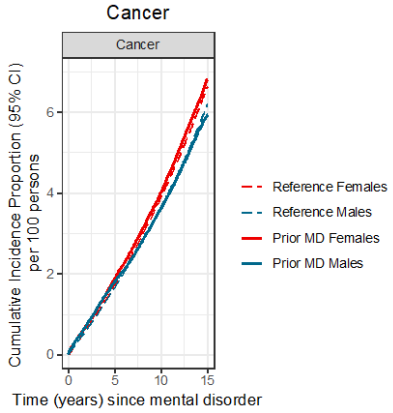
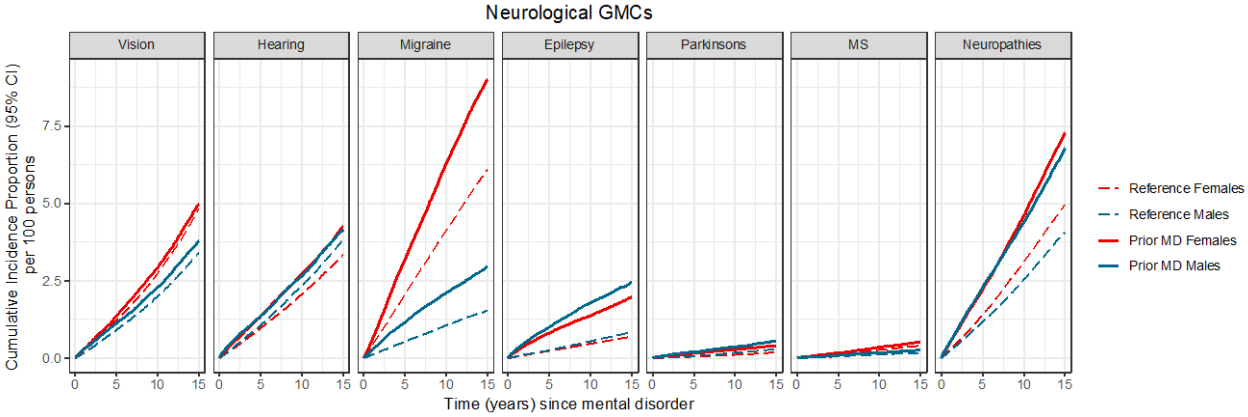


Figure S117.9 – Neurological Conditions



Figures S118.1-S118.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Eating Disorders

Figure S118.1 – Circulatory Conditions

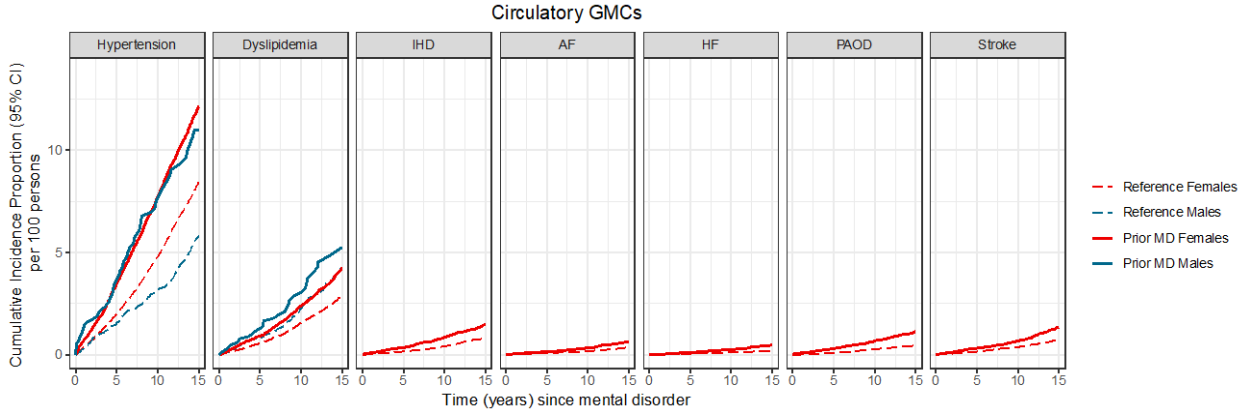


Figure S118.2 – Endocrine Conditions

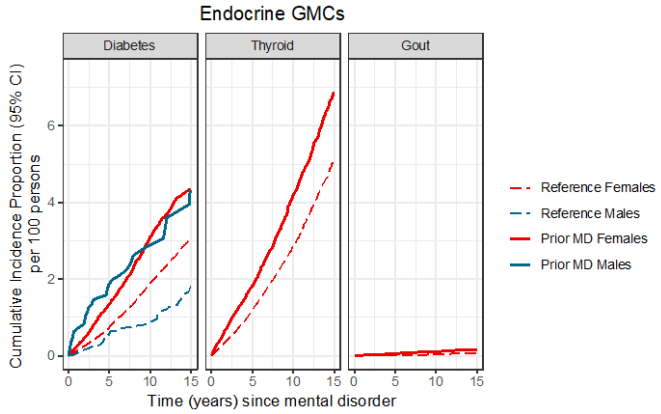


Figure S118.3 – Pulmonary Conditions

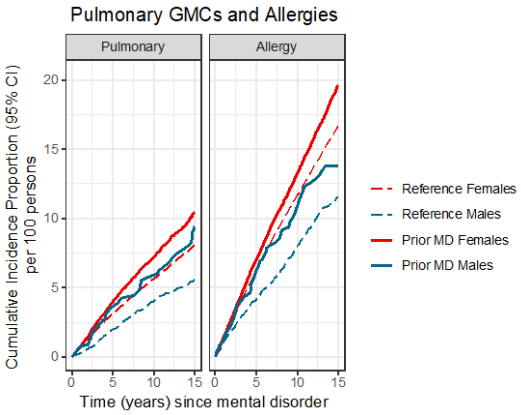


Figure S118.4 – Gastrointestinal Conditions

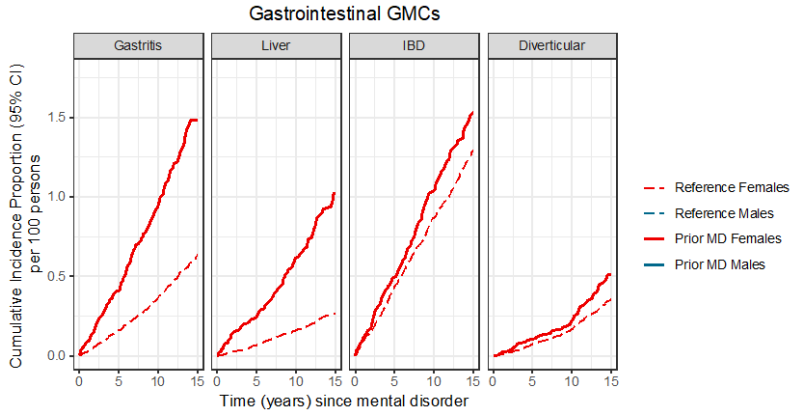


Figure S118.5 – Urogenital Conditions

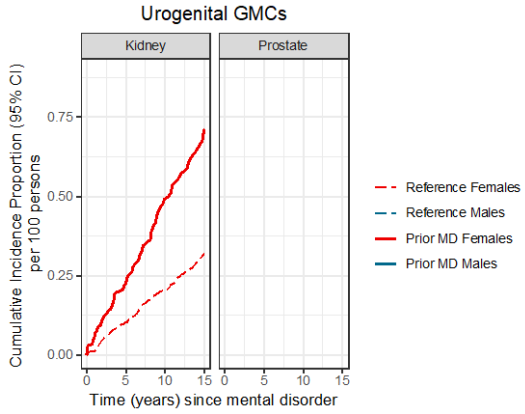


Figure S118.6 – Musculoskeletal Conditions

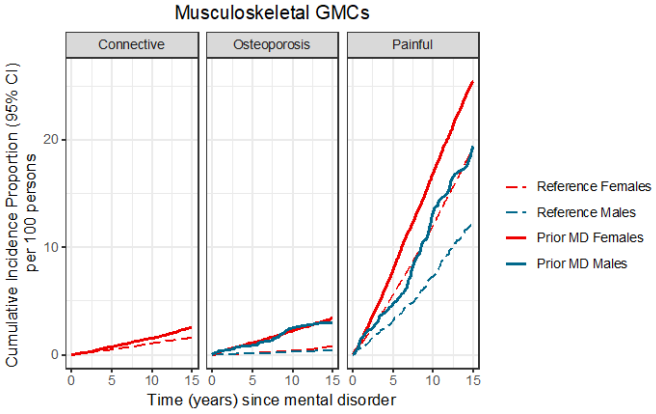


Figure S118.7 – Hematological Conditions

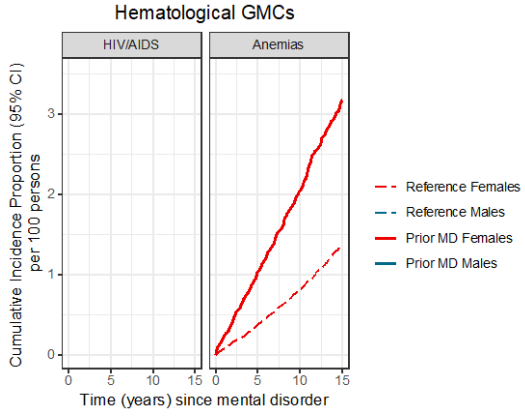


Figure S118.8 – Cancers

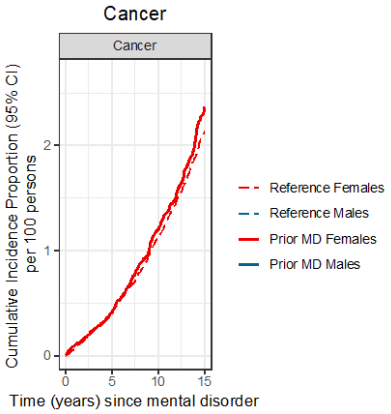
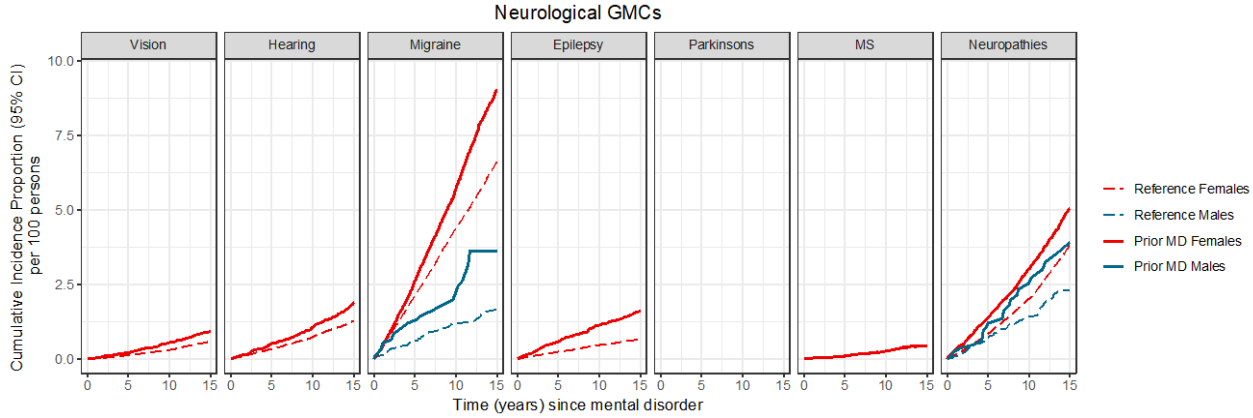


Figure S118.9 – Neurological Conditions



Figures S119.1-S119.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Personality Disorders

Figure S119.1 – Circulatory Conditions

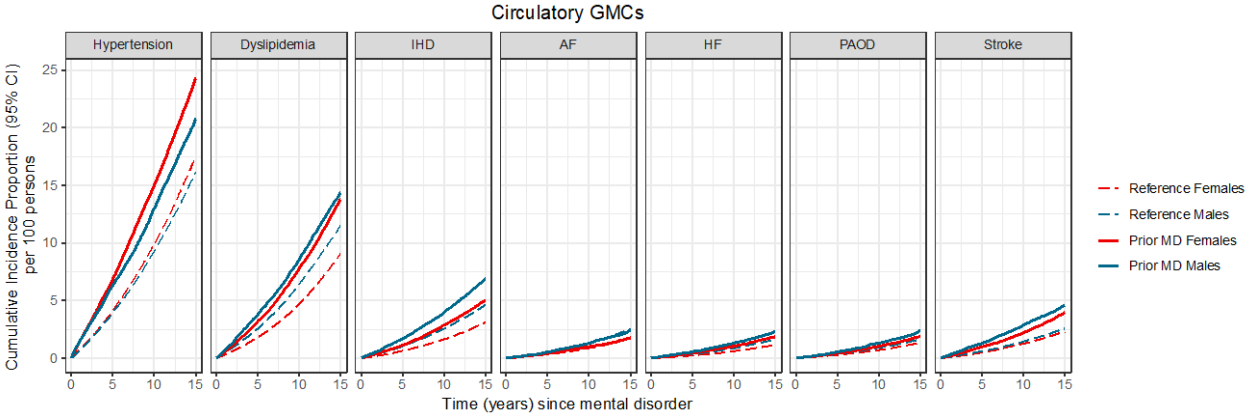


Figure S119.2 – Endocrine Conditions

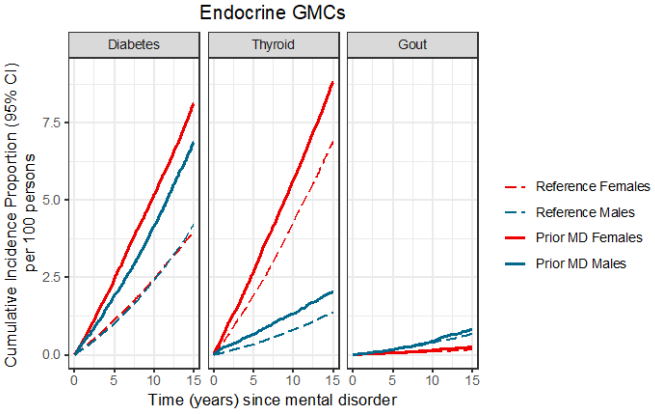


Figure S119.3 – Pulmonary Conditions

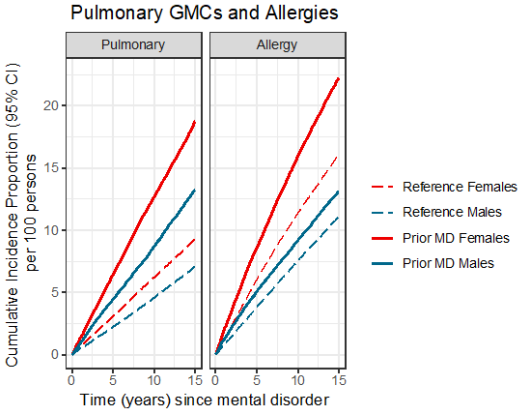


Figure S119.4 – Gastrointestinal Conditions

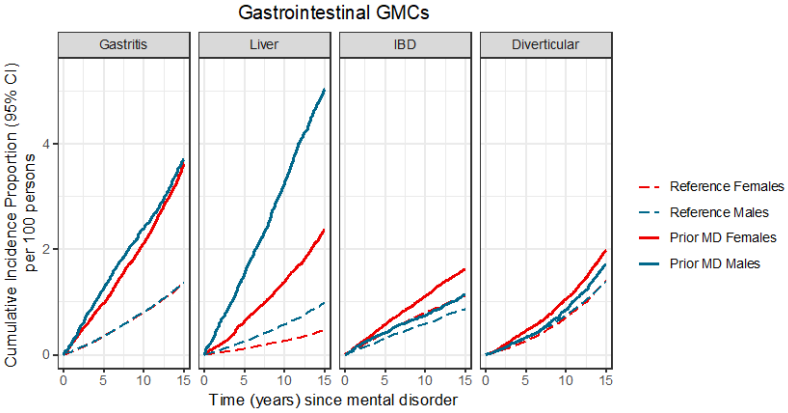


Figure S119.5 – Urogenital Conditions

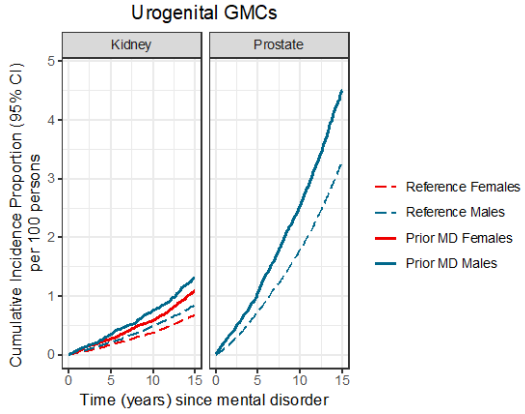


Figure S119.6 – Musculoskeletal Conditions

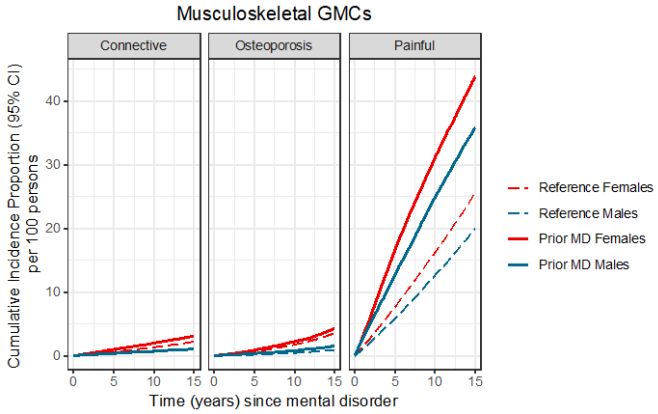


Figure S119.7 – Hematological Conditions

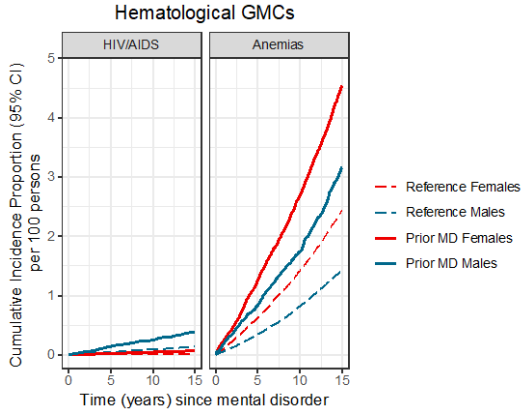


Figure S119.8 – Cancers

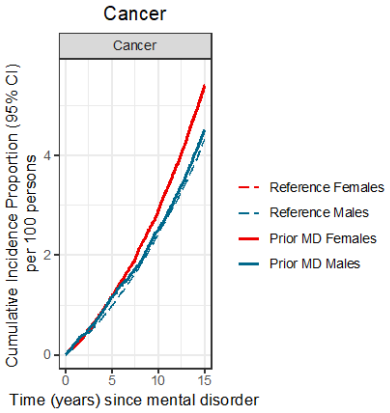
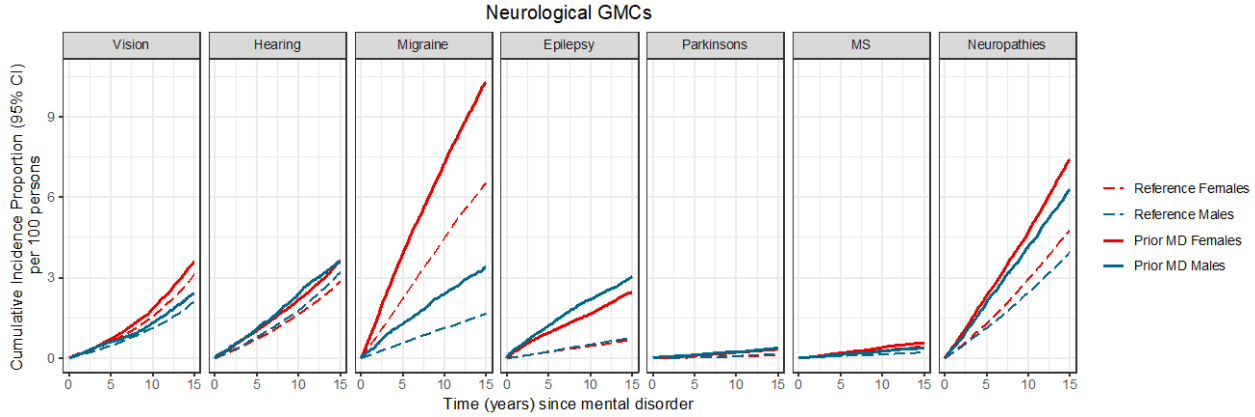


Figure S119.9 – Neurological Conditions



Figures S120.1-S120.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Intellectual Disabilities

Figure S120.1 – Circulatory Conditions

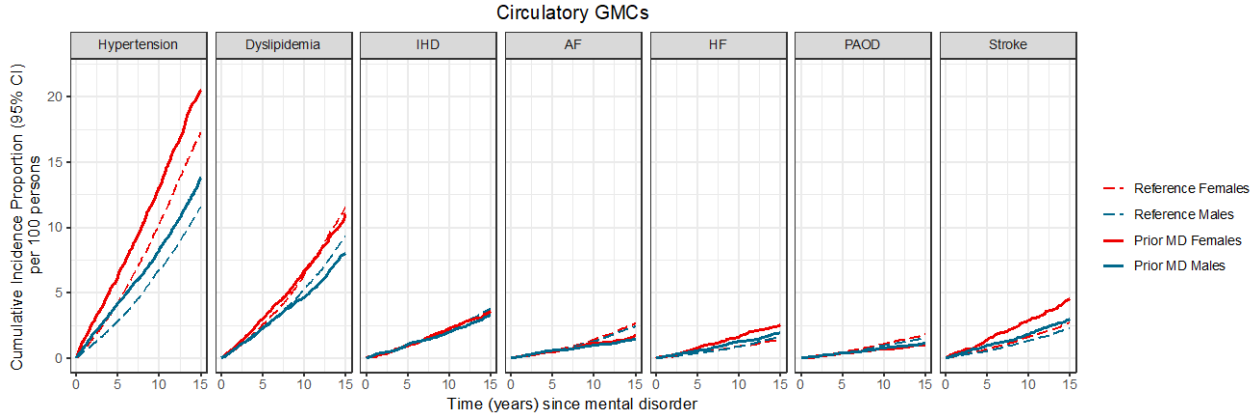


Figure S120.2 – Endocrine Conditions

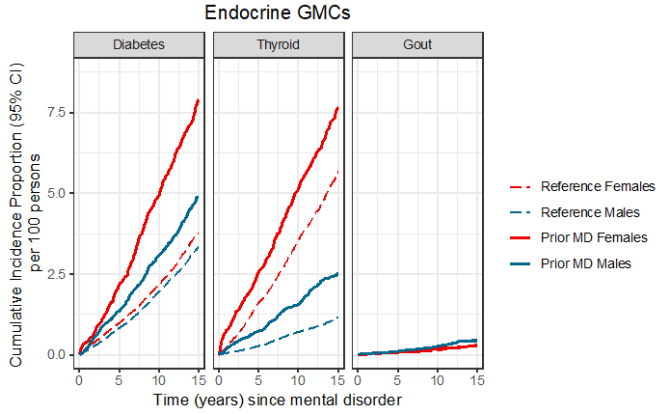


Figure S120.3 – Pulmonary Conditions

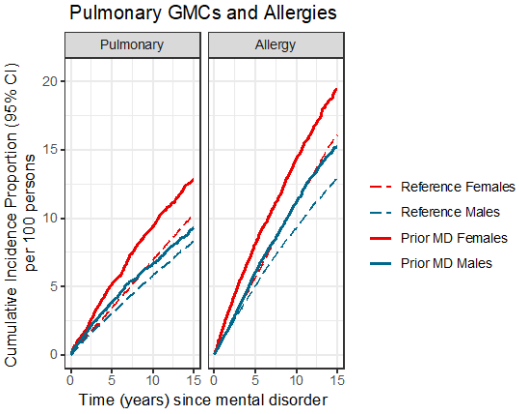


Figure S120.4 – Gastrointestinal Conditions

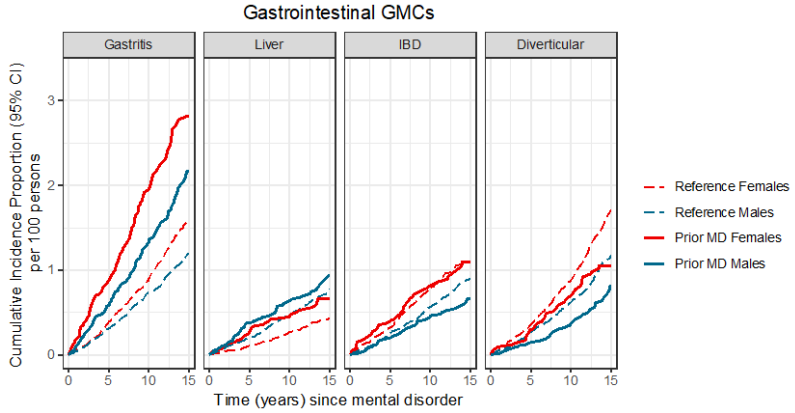


Figure S120.5 – Urogenital Conditions

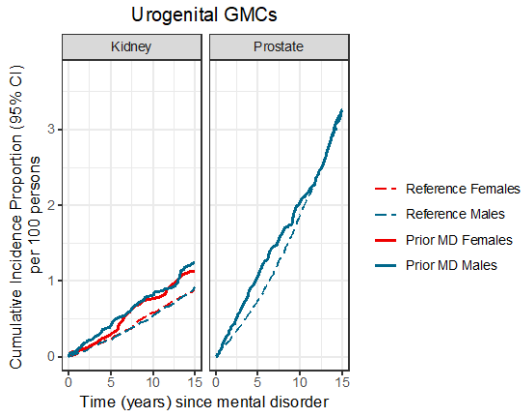


Figure S120.6 – Musculoskeletal Conditions

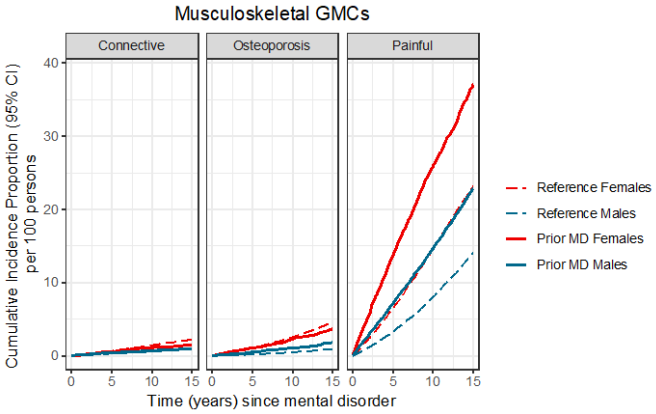


Figure S120.7 – Hematological Conditions

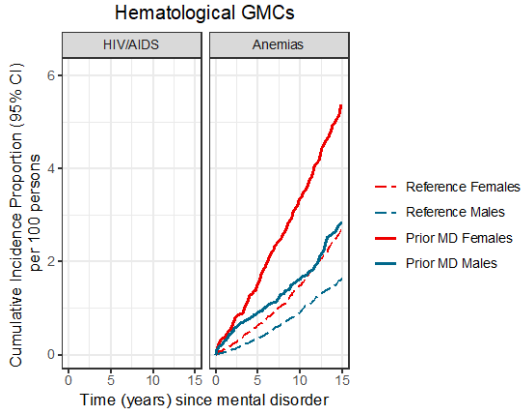


Figure S120.8 – Cancers

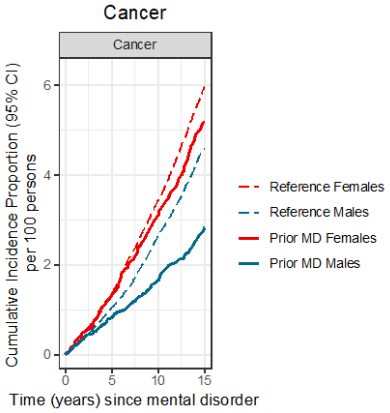
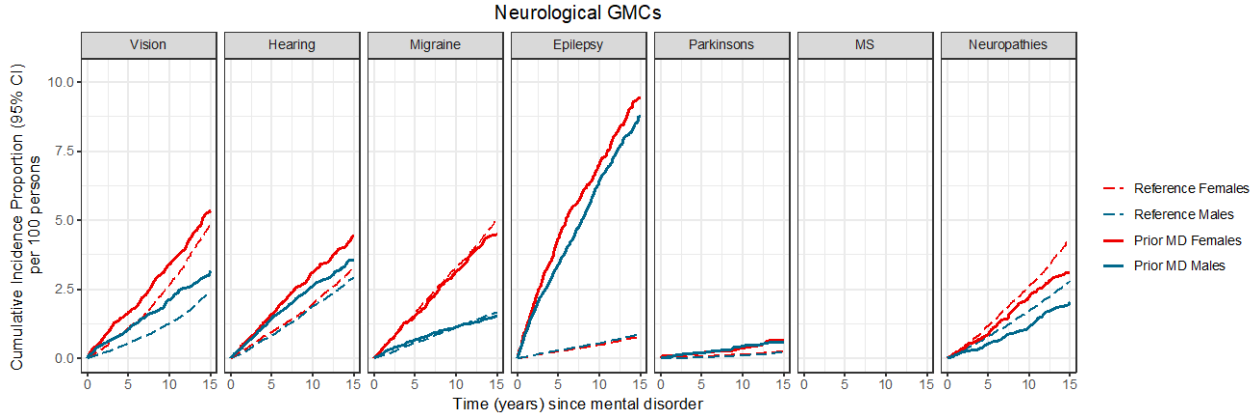


Figure S120.9 – Neurological Conditions



Figures S121.1-S121.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Developmental Disorders

Figure S121.1 – Circulatory Conditions

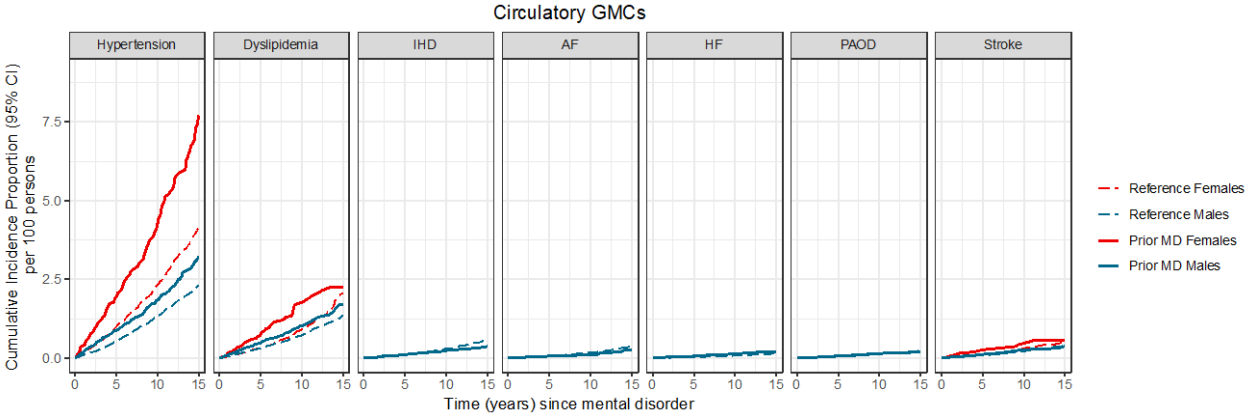


Figure S121.2 – Endocrine Conditions

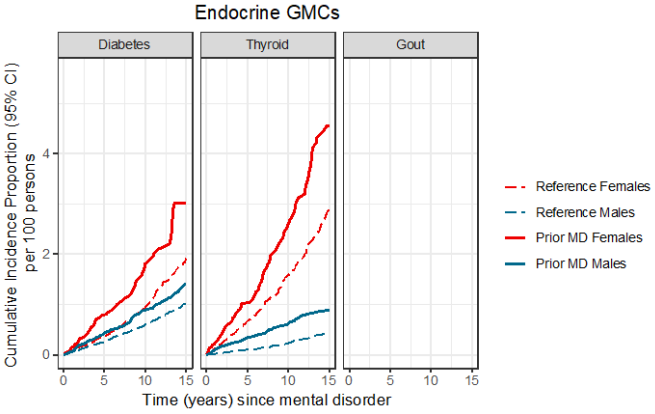


Figure S121.3 – Pulmonary Conditions

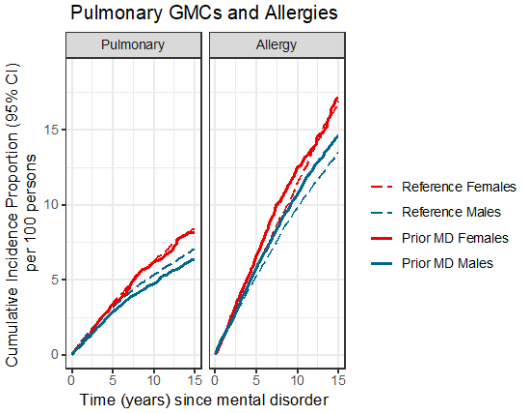


Figure S121.4 – Gastrointestinal Conditions

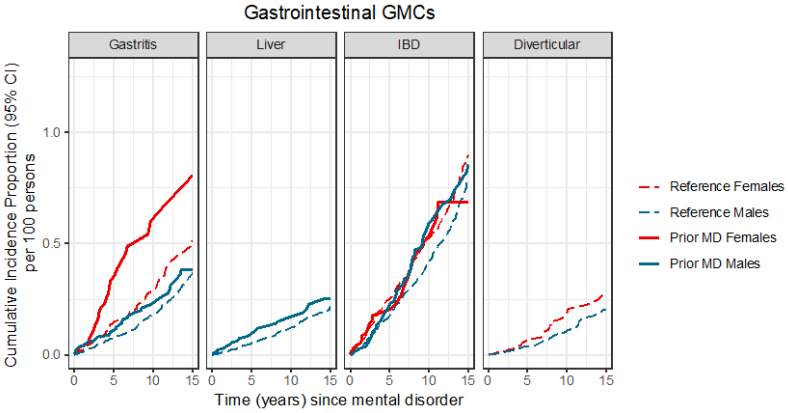


Figure S121.5 – Urogenital Conditions

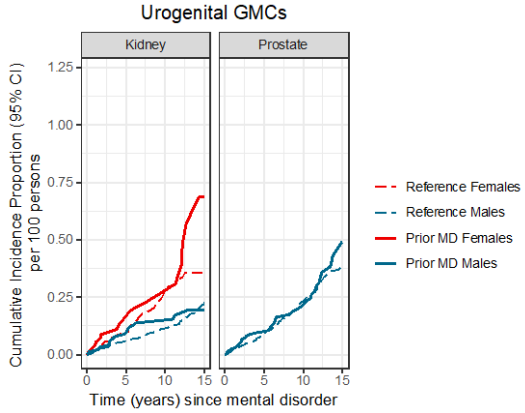


Figure S121.6 – Musculoskeletal Conditions

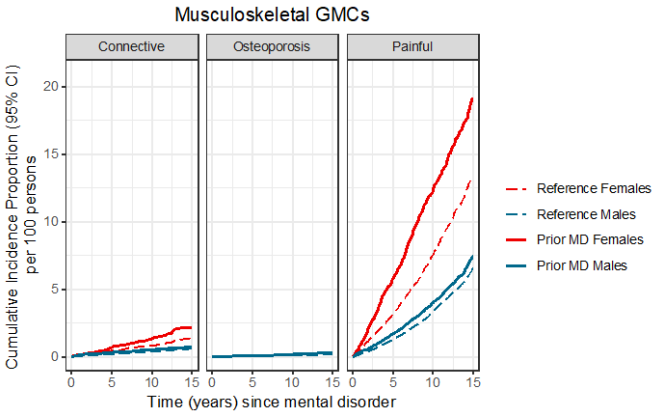


Figure S121.7 – Hematological Conditions

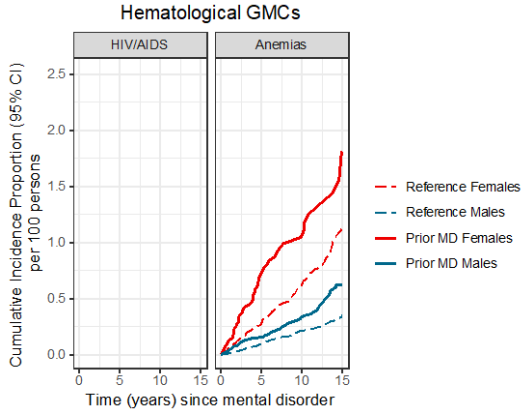


Figure S121.8 – Cancers

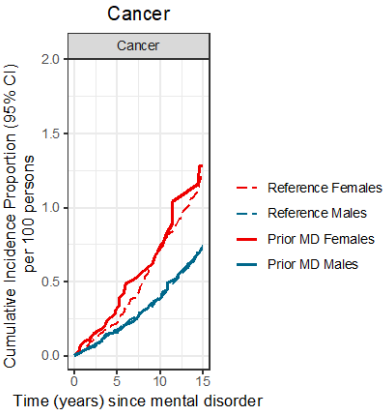
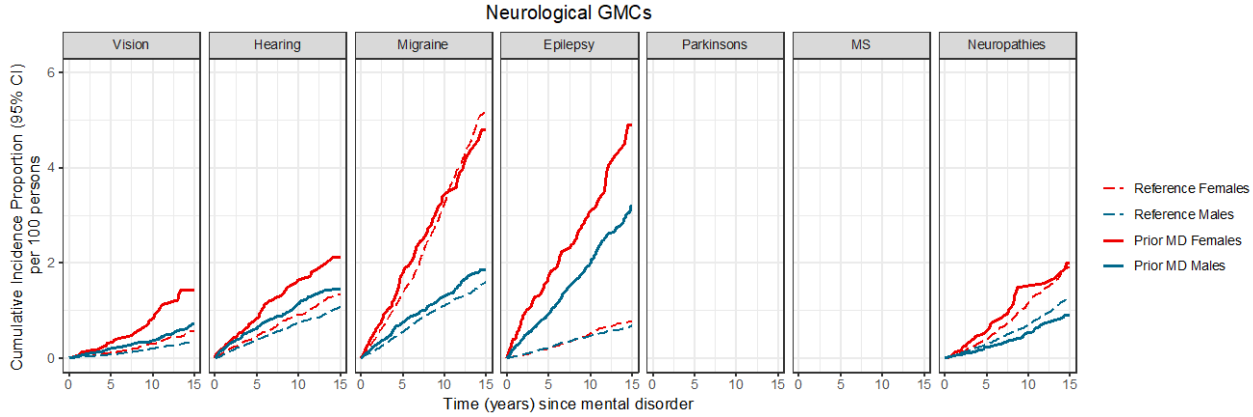


Figure S121.9 – Neurological Conditions



Figures S122.1-S122.9. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Behavioral Disorders

Figure S122.1 – Circulatory Conditions

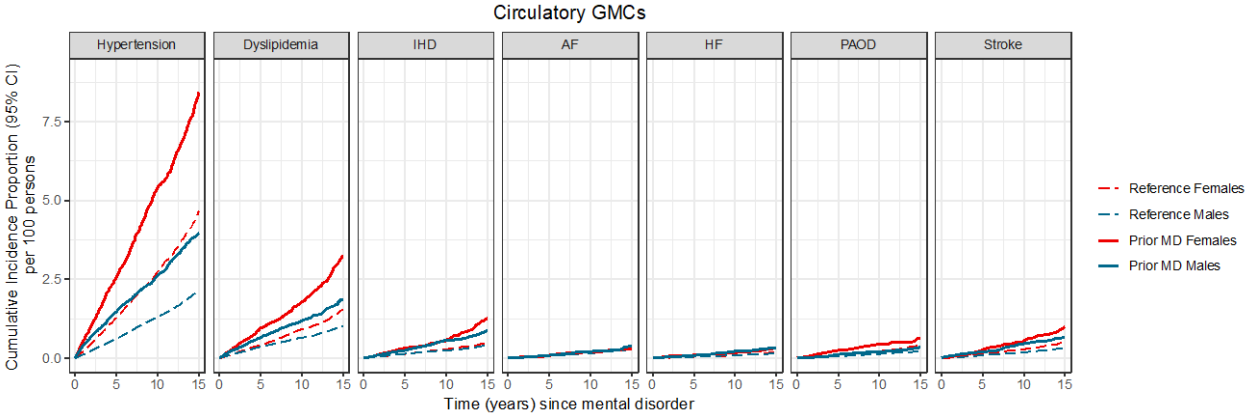


Figure S122.2 – Endocrine Conditions

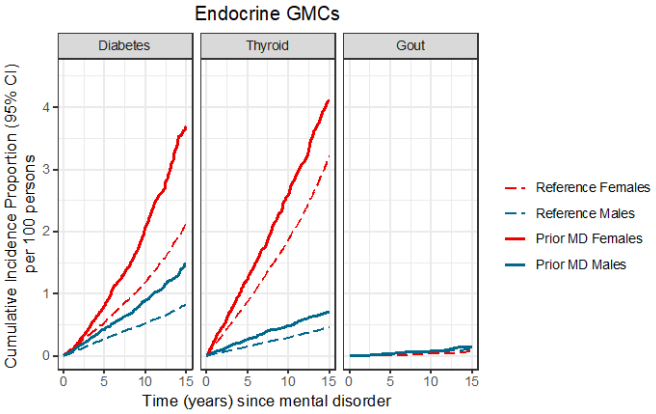


Figure S122.3 – Pulmonary Conditions

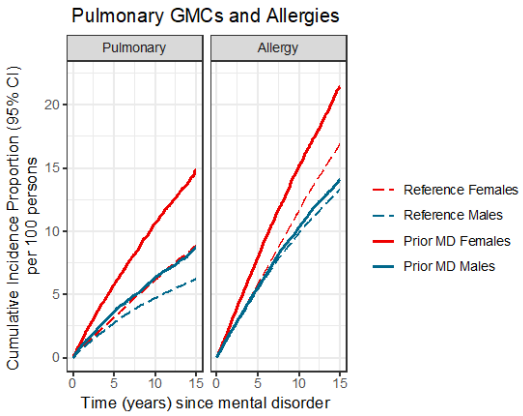


Figure S122.4 – Gastrointestinal Conditions

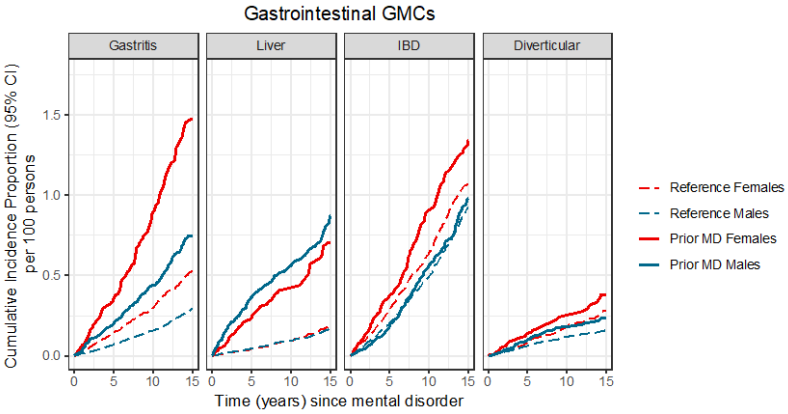


Figure S122.5 – Urogenital Conditions

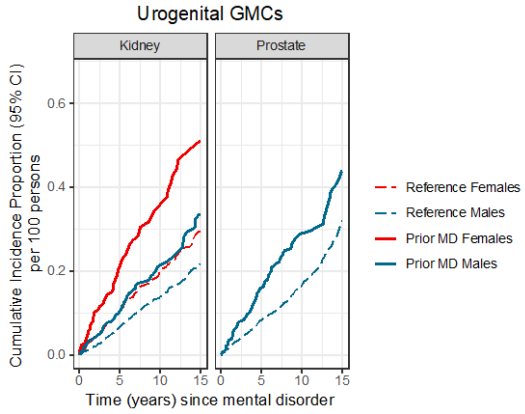


Figure S122.6 – Musculoskeletal Conditions

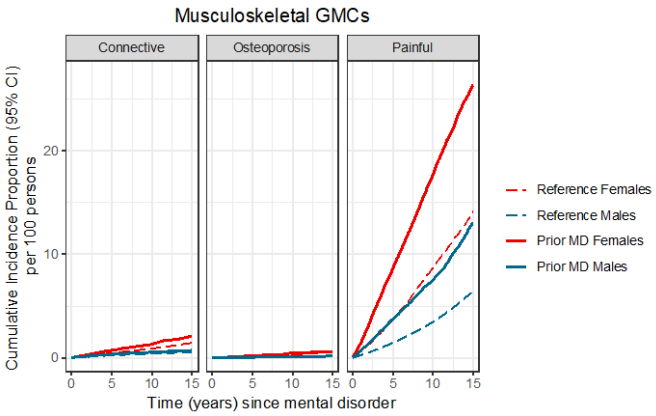


Figure S122.7 – Hematological Conditions

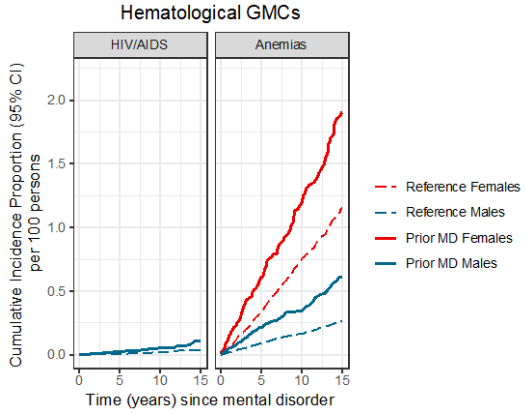


Figure S122.8 – Cancers

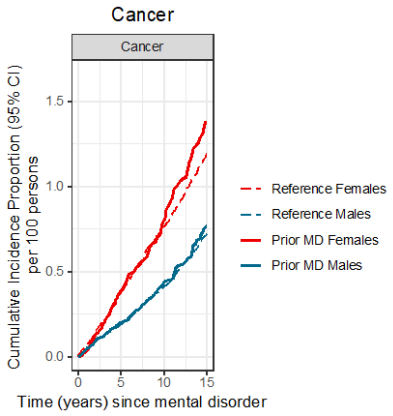
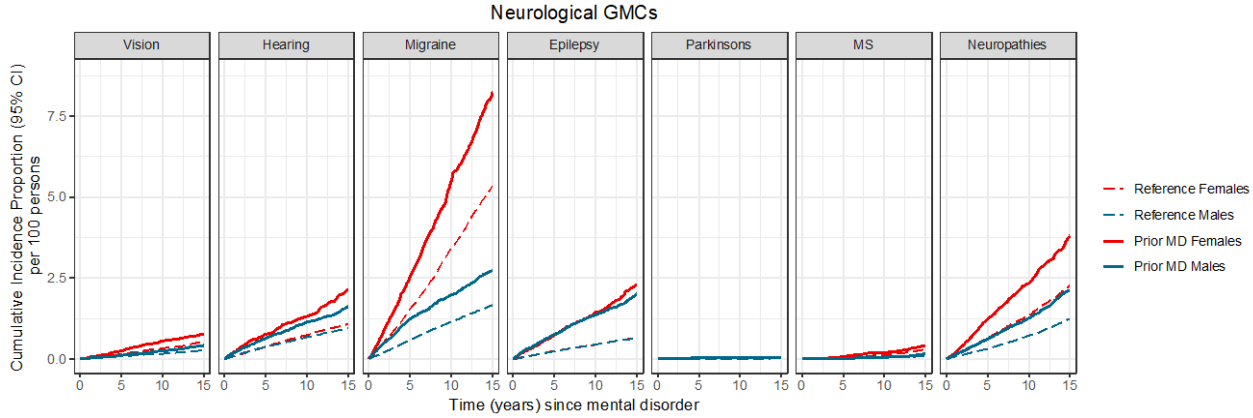


Figure S122.9 – Neurological Conditions



Figures S123-S142. Absolute risks of specific general medical conditions after a diagnosis of mental disorders, depending on age at first onset of the mental disorder

The following set of figures shows the sex- and time-specific absolute risks of being diagnosed with all general medical conditions after being previously diagnosed with one of the mental disorders, organized by medical condition category. They show the cumulative incidence proportions (CIPs) and 95% confidence intervals (95% CIs) estimated across all ages of being diagnosed with each general medical condition (shown as label at the top of each panel). Each person diagnosed with a specific mental disorder was matched to up to five 'reference individuals' of the same sex and born within 30 days of them. CIPs are shown for both those who were diagnosed with a specific mental disorder from the time of diagnosis (bold, solid line) and the reference group (dashed lines).

Two graphs are provided for each mental disorder: CIPs for all persons (black lines) and sex-specific CIPs (males indicated by blue lines, females by red). Confidence intervals are displayed only for those with prior mental disorders, as the 95% CIs for the reference group will be proportional to those for people with prior mental disorders, but smaller. In some cases, 95% CIs are too small to be visible.

The horizontal axes show the time since first diagnosis of the mental disorder (or since diagnosis of the person the reference individuals were matched to). The vertical axes show the cumulative incidence proportions and 95% CIs (note these axes vary for each set of graphs).

Estimates with fewer than 50 persons at risk or fewer than 15 cases are not shown. Where numbers were too small to show CIPs for those with mental disorders, reference CIPs are not displayed either. Reference CIPs may be obscured by the CIPs for those with mental disorders if estimates are very similar throughout follow-up.

Displaying estimates for all persons

The y-axis varies by graph, but ranges from 0-68

S123. Organic Disorders
S124. Substance Use Disorders
S125. Schizophrenia
S126. Mood Disorders
S127. Neurotic Disorders
S128. Eating Disorders
S129. Personality Disorders
S130. Intellectual Disorders
S131. Developmental Disorders
S132. Behavioral Disorders

Displaying sex-specific estimates

The y-axis varies by graph, but ranges from 0-71

S133. Organic Disorders
S134. Substance Use Disorders
S135. Schizophrenia
S136. Mood Disorders
S137. Neurotic Disorders
S138. Eating Disorders
S139. Personality Disorders
S140. Intellectual Disorders
S141. Developmental Disorders
S142. Behavioral Disorders

Figures S123.1-S123.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Organic Disorders

Figure S123.1 – Hypertension

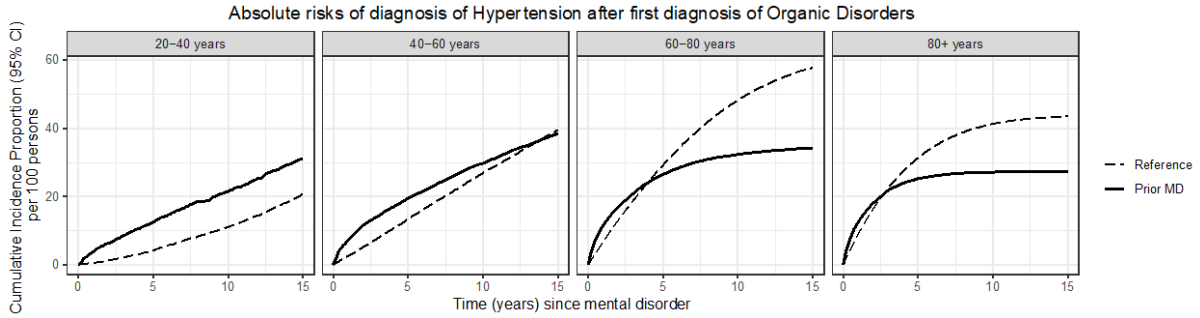


Figure S123.2 – Dyslipidemia

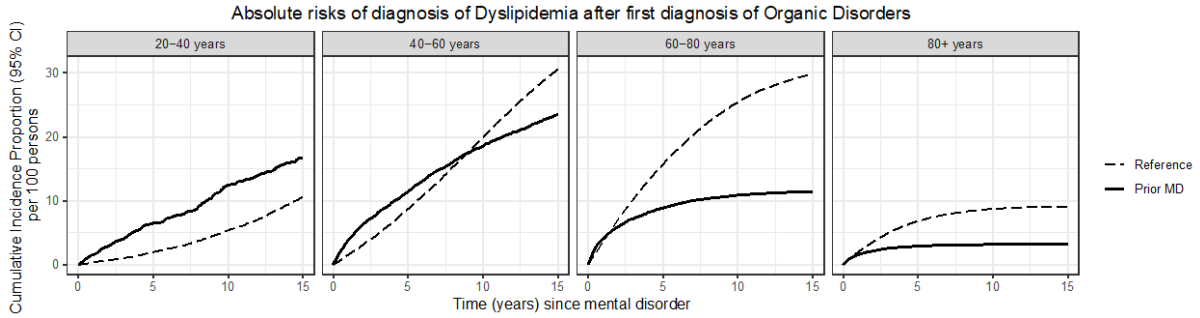


Figure S123.3 – Ischemic Health Disease

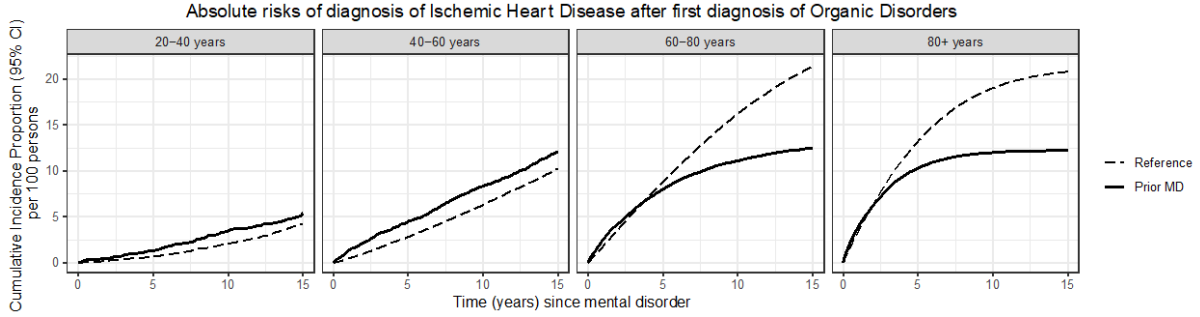


Figure S123.4 – Atrial Fibrillation

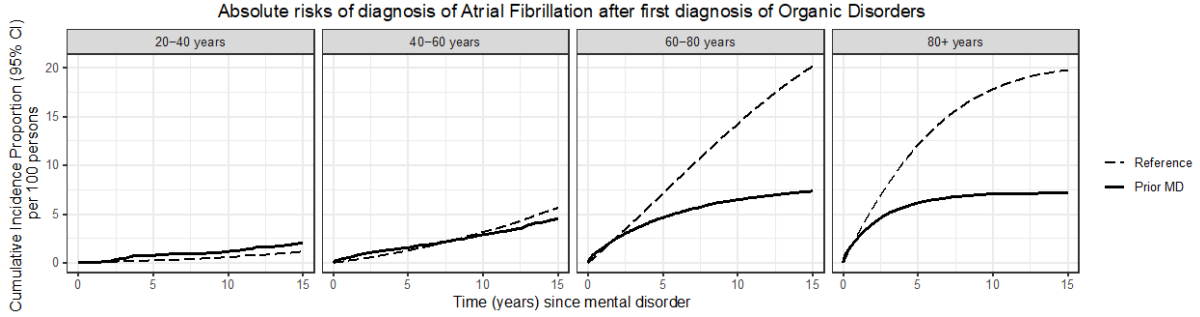


Figure S123.5 – Heart Failure

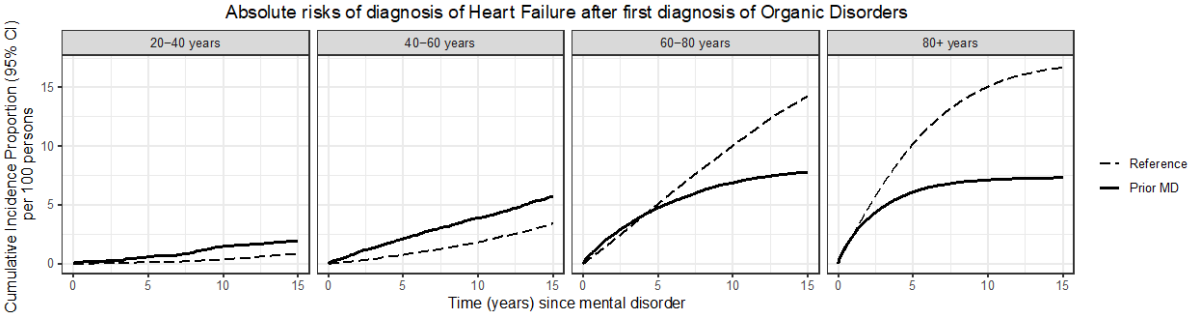


Figure S123.6 – Peripheral Artery Occlusive Disease

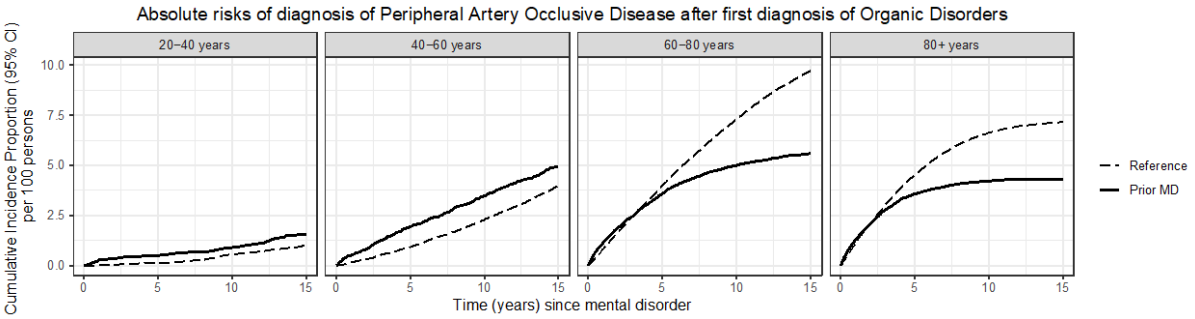


Figure S123.7 – Stroke

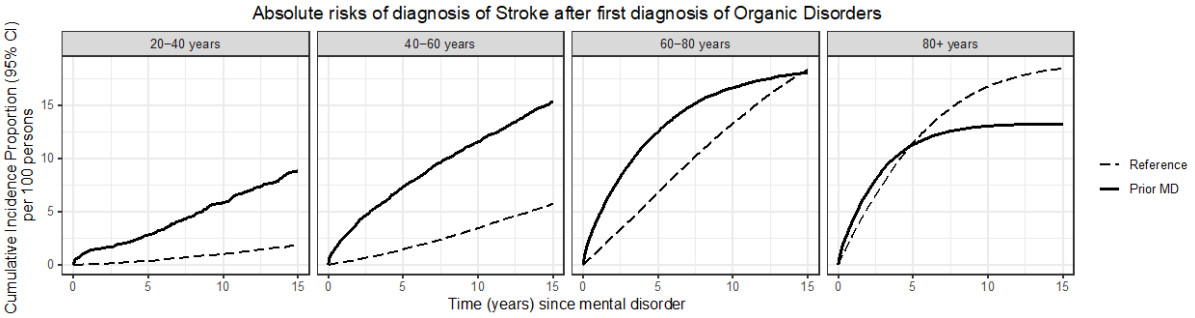


Figure S123.8 – Diabetes Mellitus

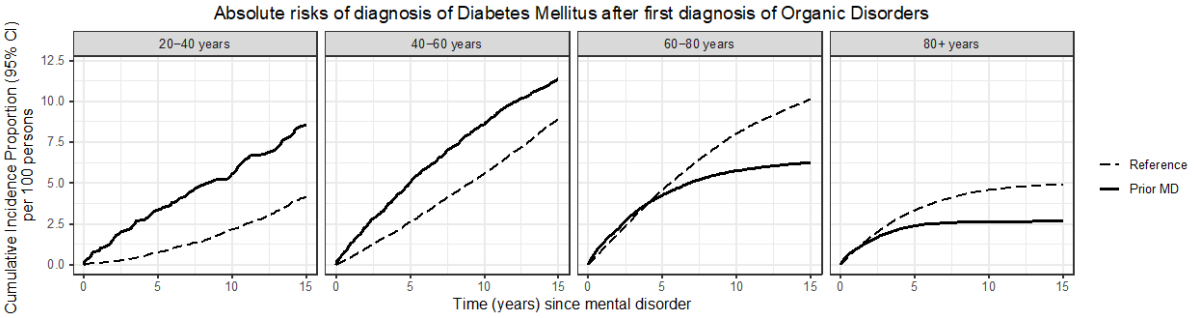


Figure S123.9 – Thyroid Disorders

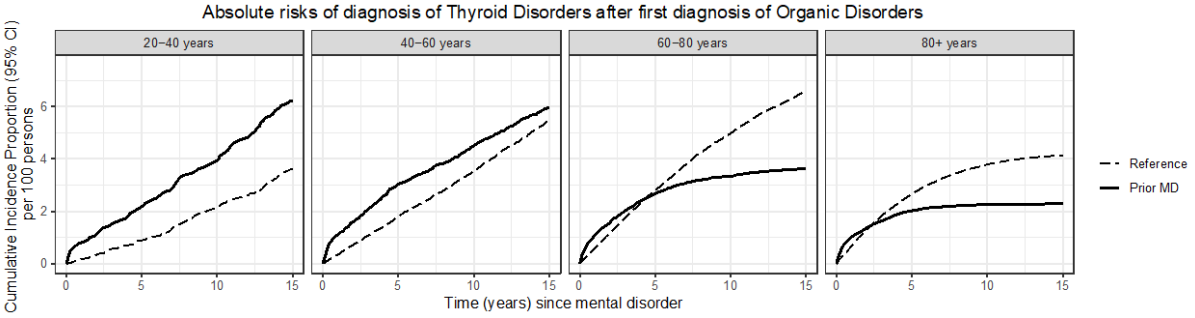


Figure S123.10 – Gout

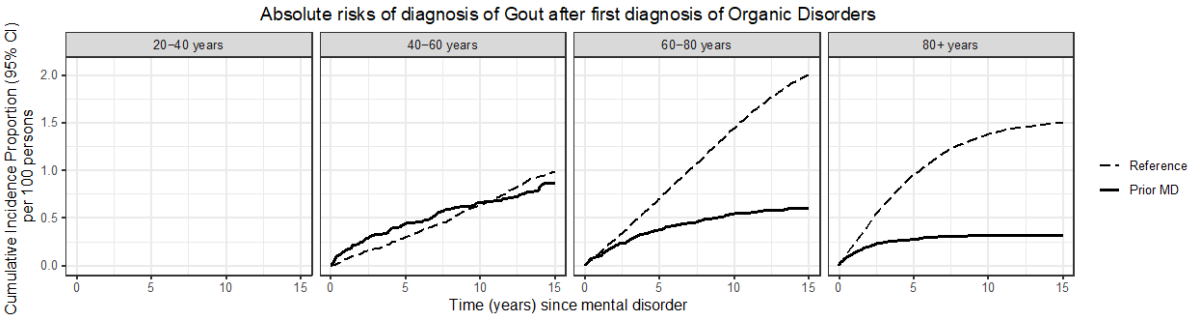


Figure S123.11 – Chronic Pulmonary Disease

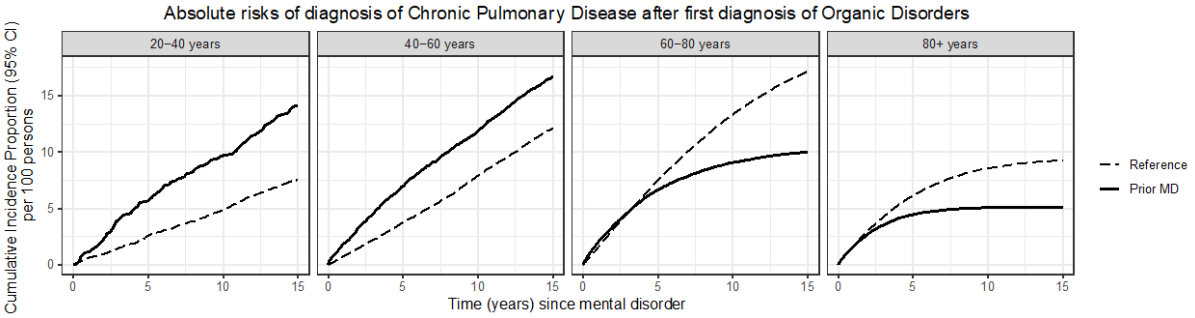


Figure S123.12 – Allergy

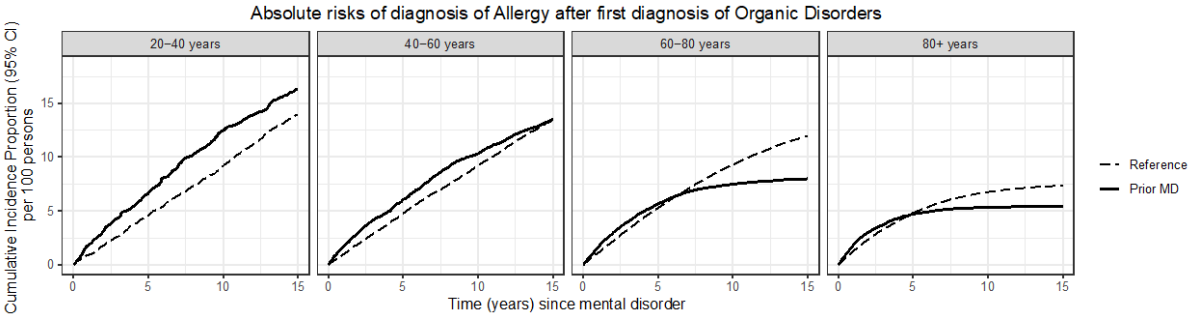


Figure S123.13 – Ulcer/Chronic Gastritis

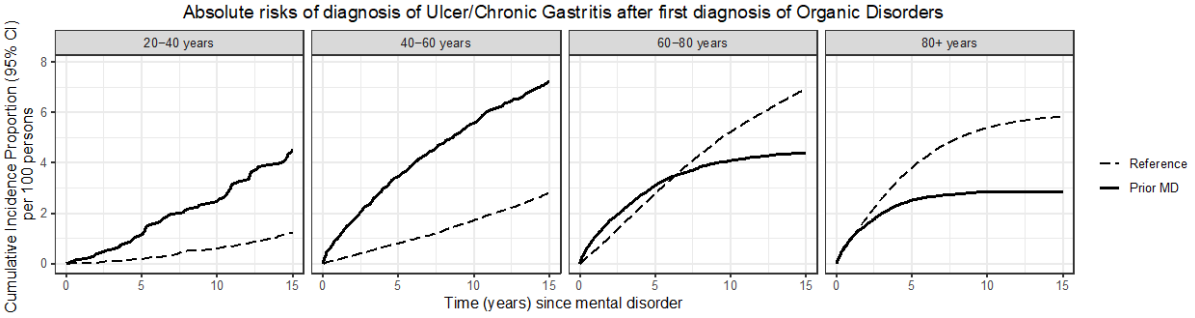


Figure S123.14 – Chronic Liver Disease

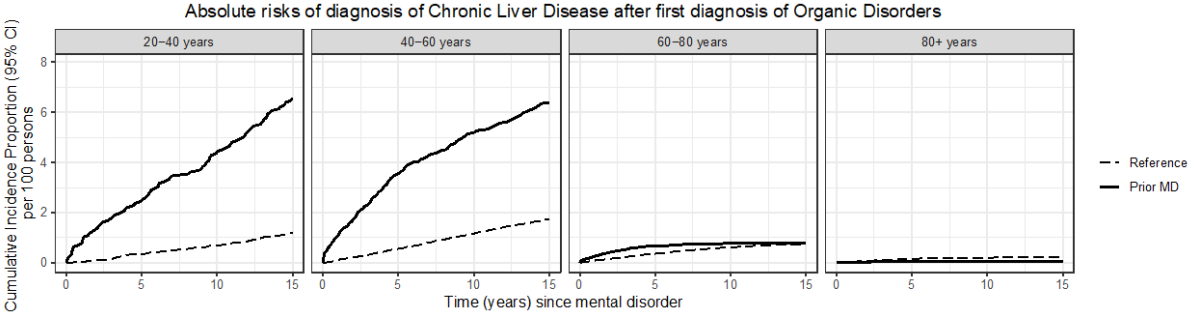


Figure S123.15 – Inflammatory Bowel Disease

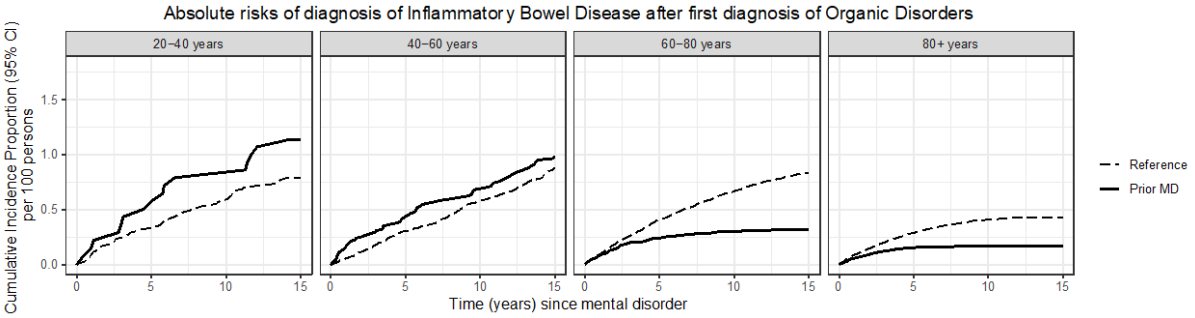


Figure S123.16 – Diverticular Disease of the Intestine

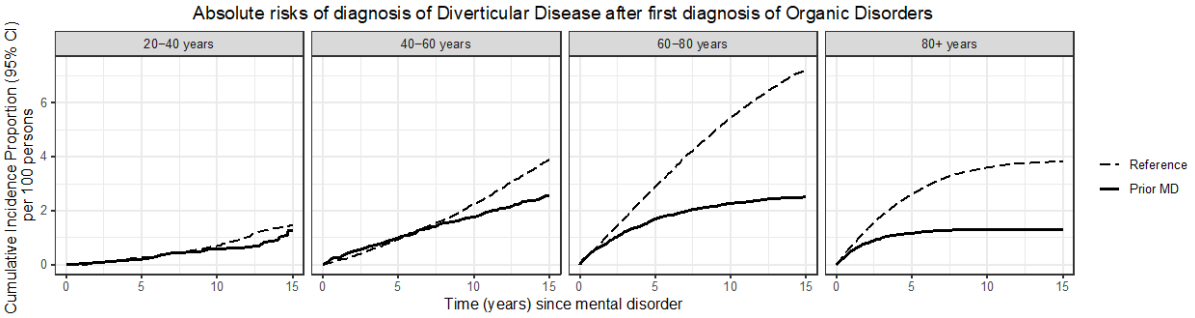


Figure S123.17 – Chronic Kidney Disease

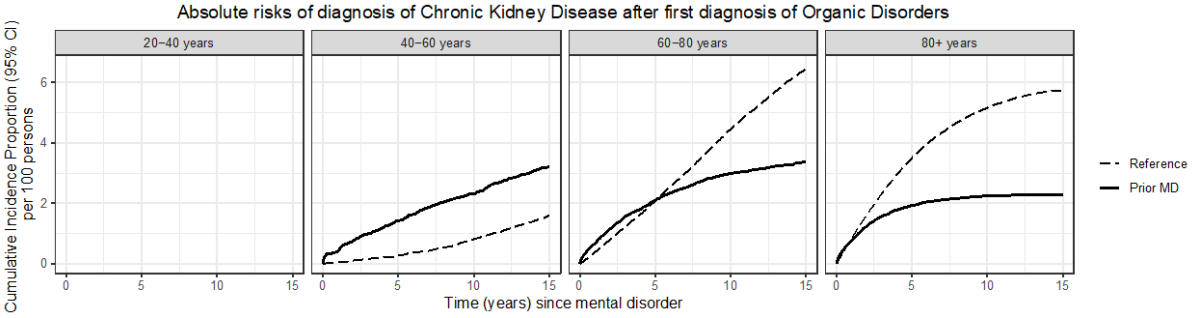


Figure S123.18 – Prostate Disorders

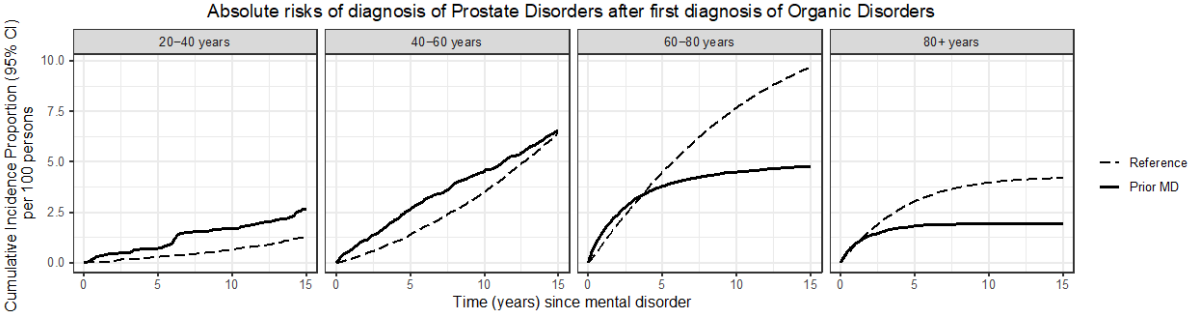


Figure S123.19 – Connective Tissue Disorders

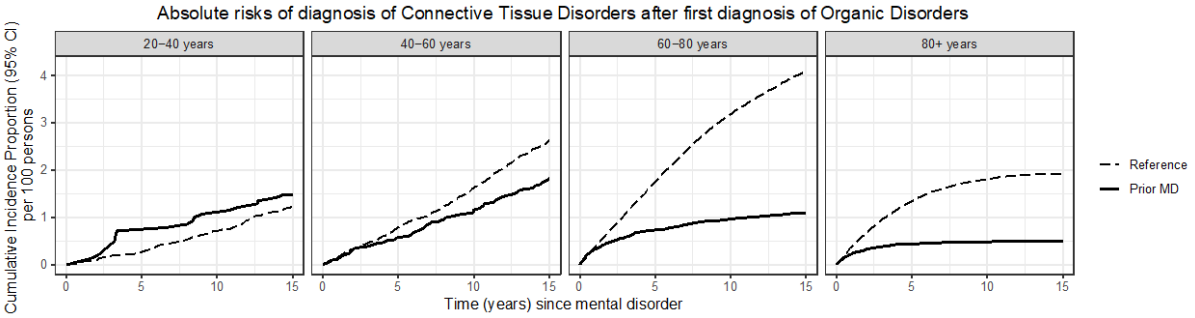


Figure S123.20 – Osteoporosis

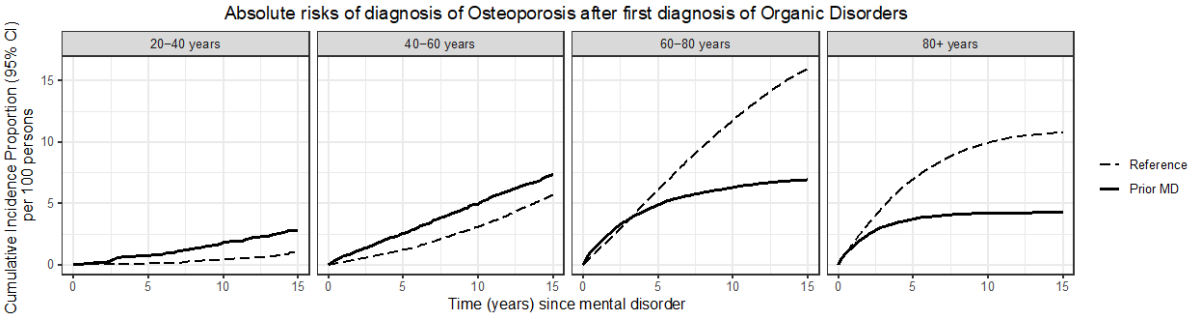


Figure S123.21 – Painful Conditions

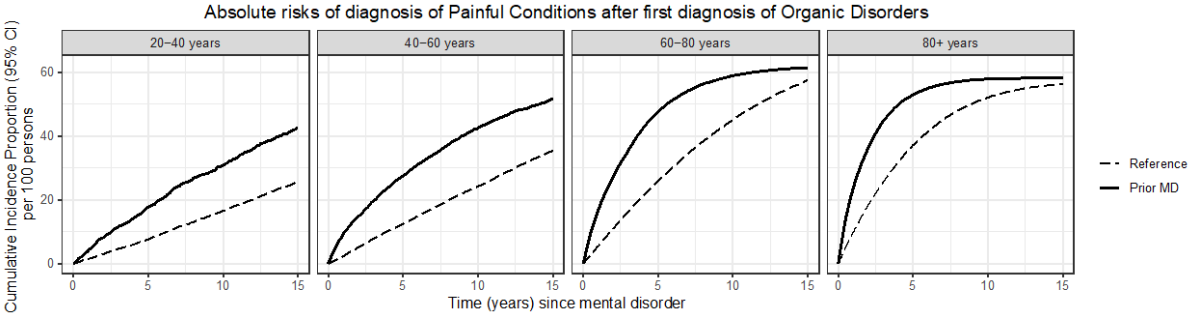


Figure S123.22 – HIV/AIDS

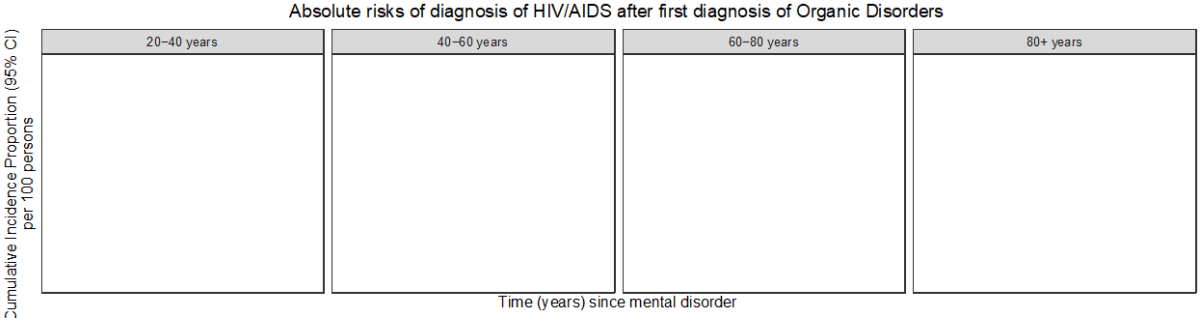


Figure S123.23 – Anemias

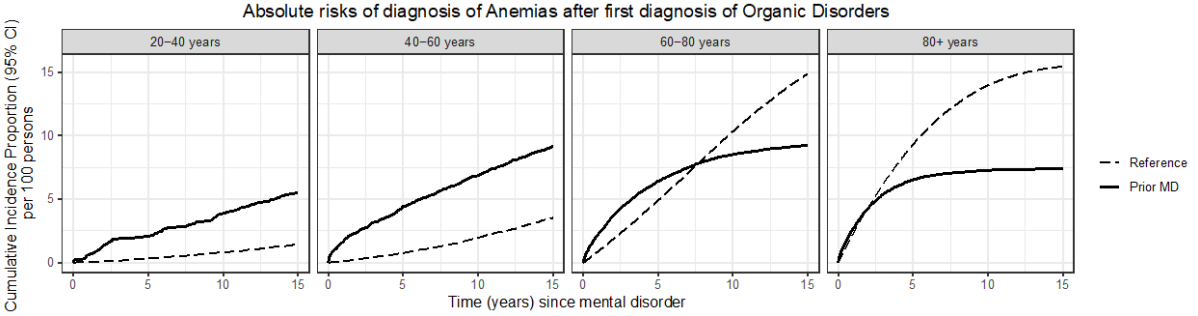


Figure S123.24 – Cancer

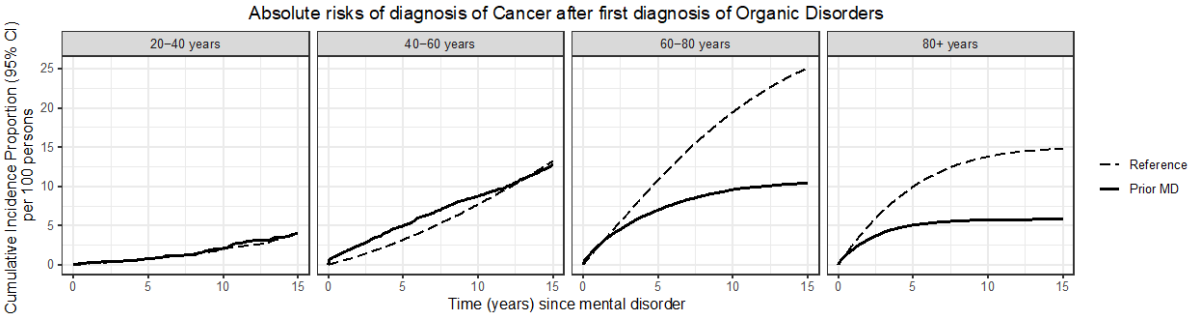


Figure S123.25 – Vision Problems

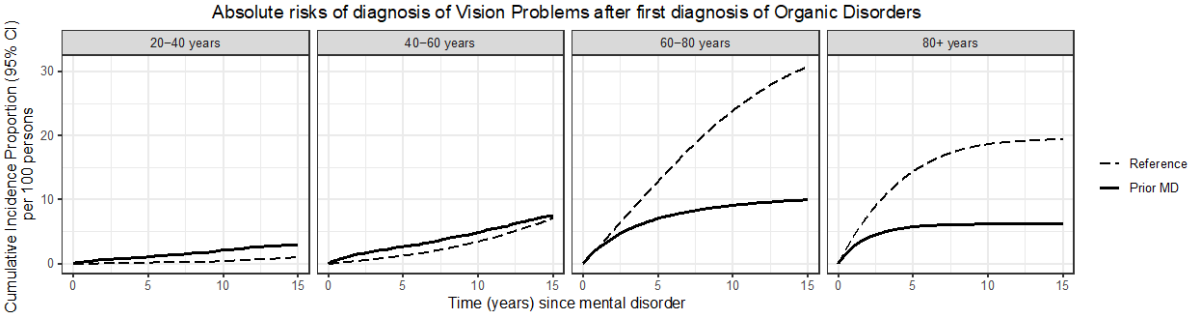


Figure S123.26 – Hearing Problems

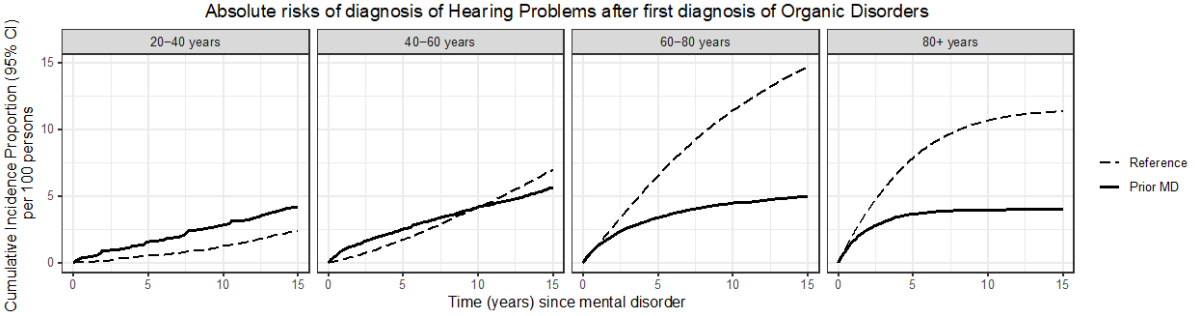


Figure S123.27 – Migraine

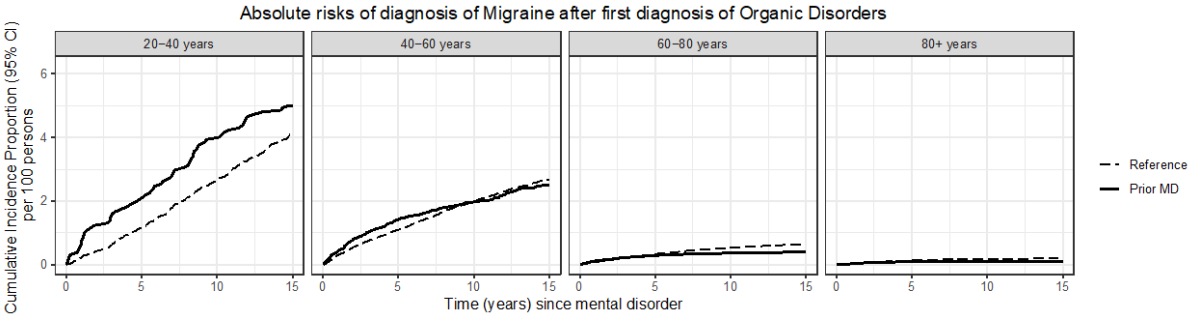


Figure S123.28 – Epilepsy

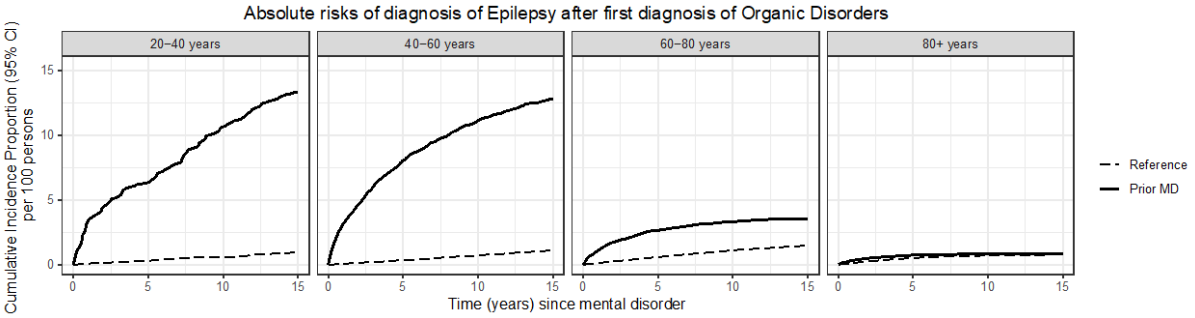


Figure S123.29 – Parkinson's Disease

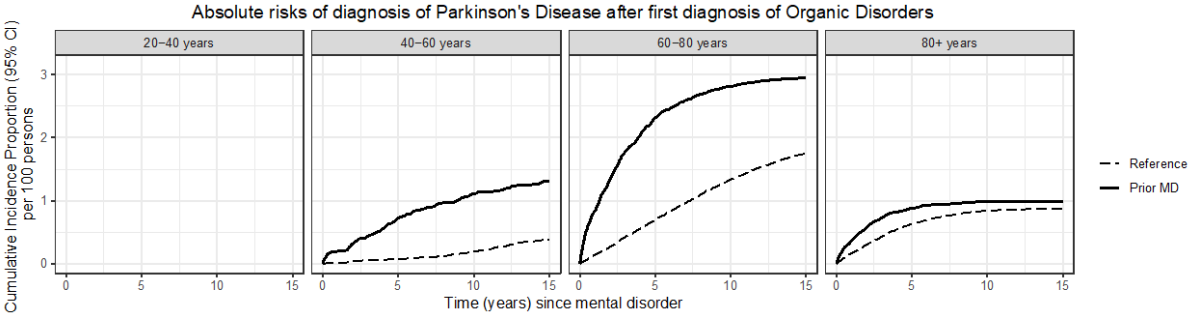


Figure S123.30 – Multiple Sclerosis

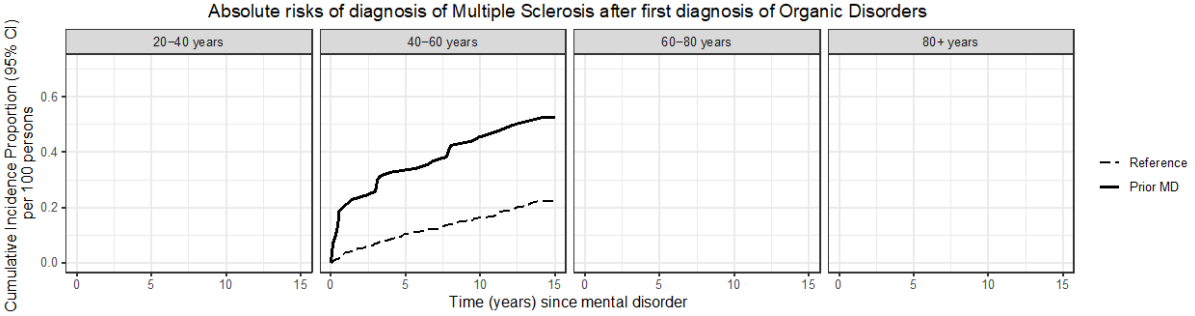
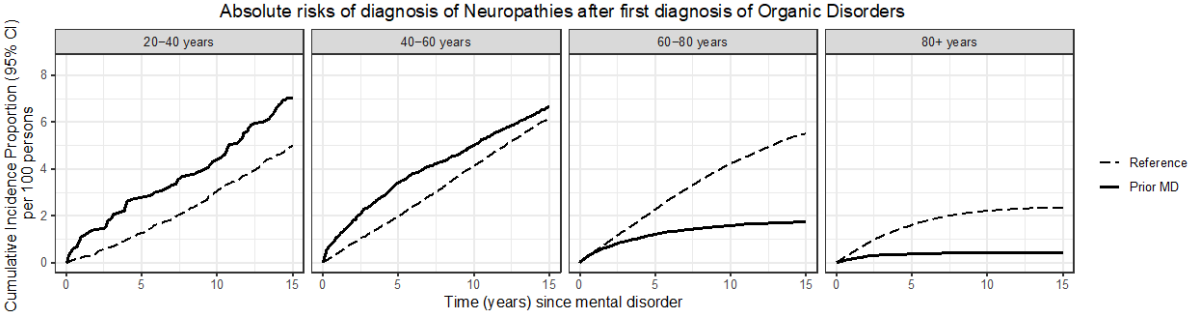


Figure S123.31 – Neuropathies



Figures S124.1-S124.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Substance Use Disorders

Figure S124.1 – Hypertension

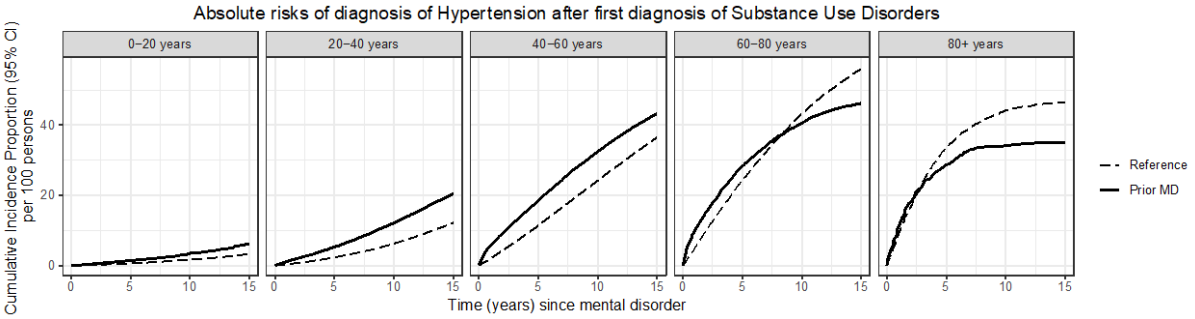


Figure S124.2 – Dyslipidemia

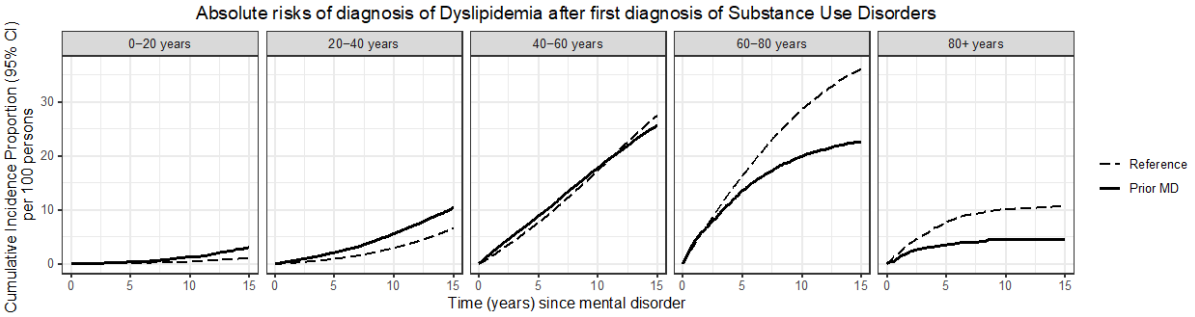


Figure S124.3 – Ischemic Heart Disease

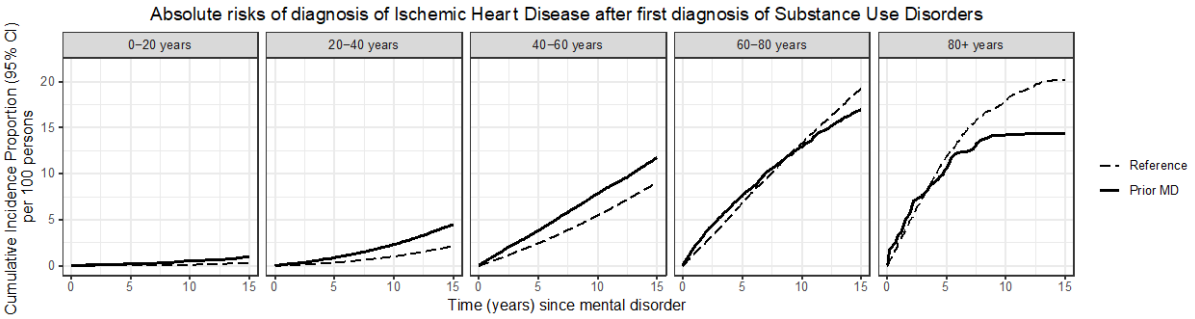


Figure S124.4 – Atrial Fibrillation

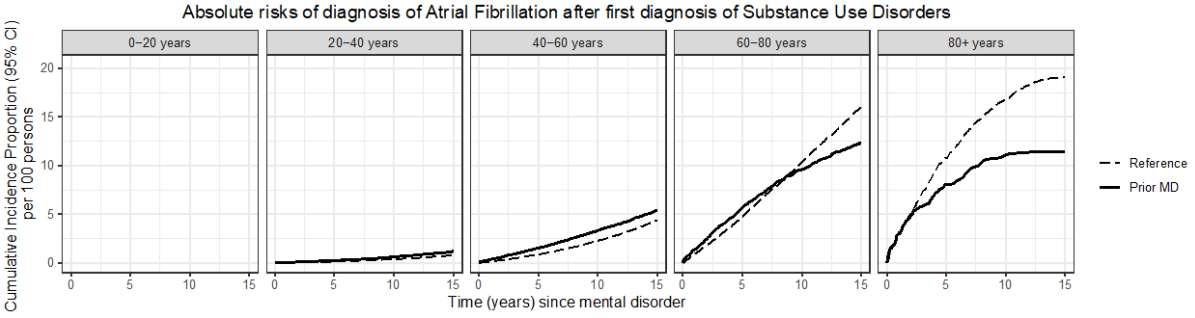


Figure S124.5 – Heart Failure

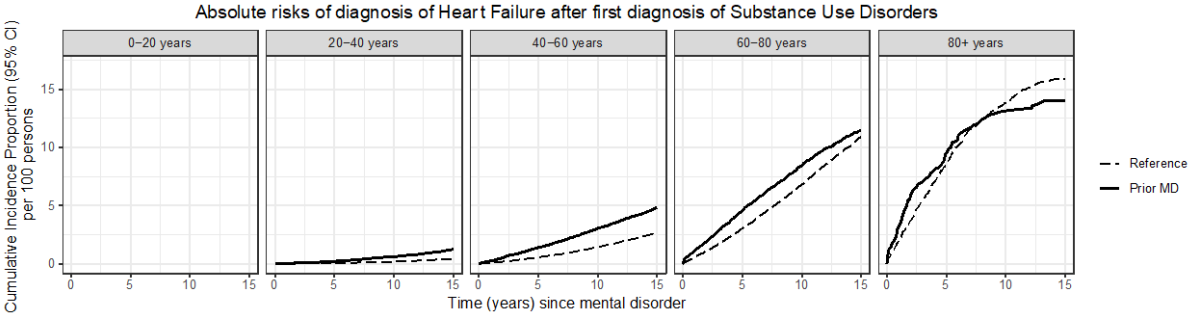


Figure S124.6 – Peripheral Artery Occlusive Disease

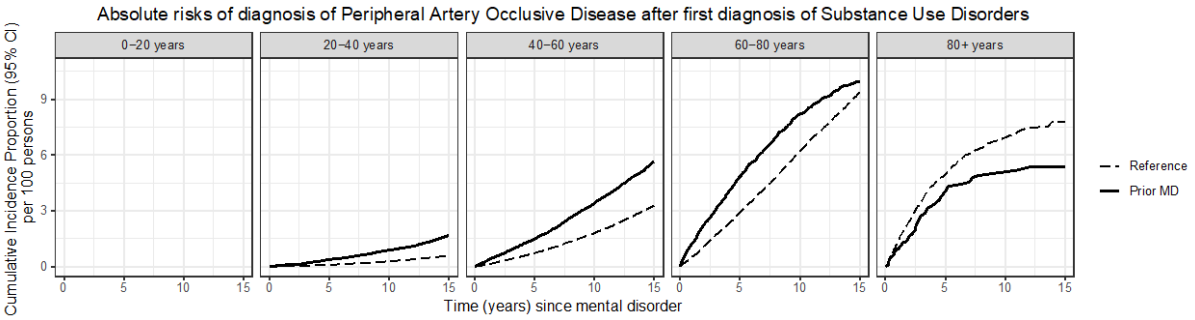


Figure S124.7 – Stroke

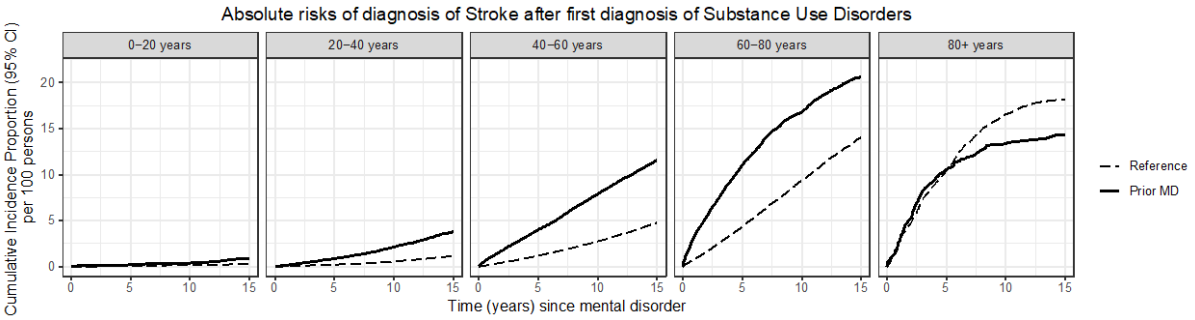


Figure S124.8 – Diabetes Mellitus

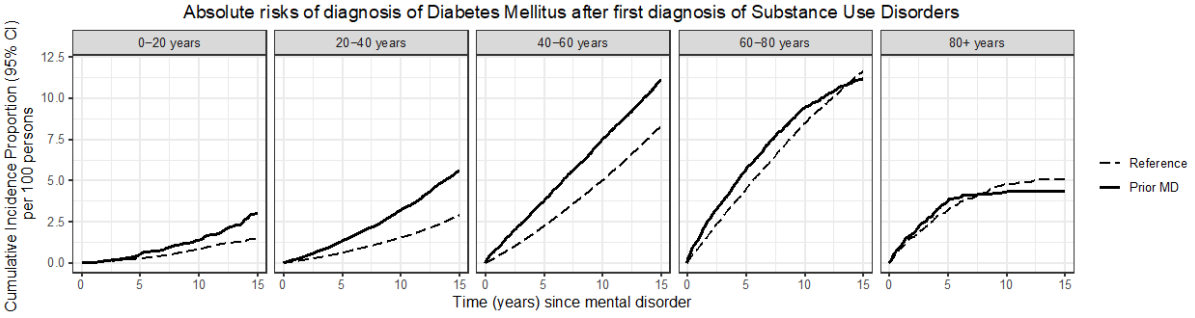


Figure S124.9 – Thyroid Disorder

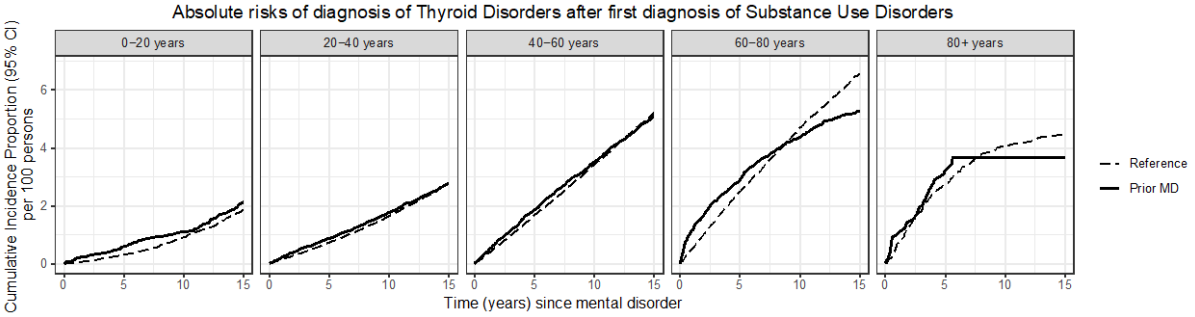


Figure S124.10 – Gout

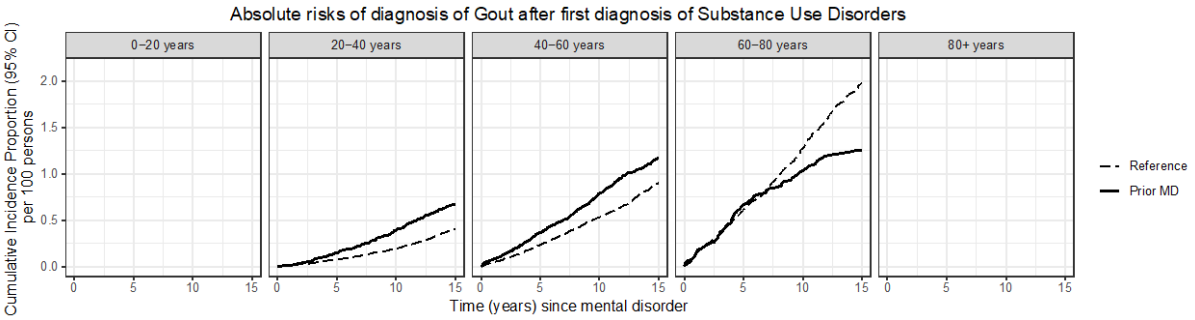


Figure S124.11 – Chronic Pulmonary Disease

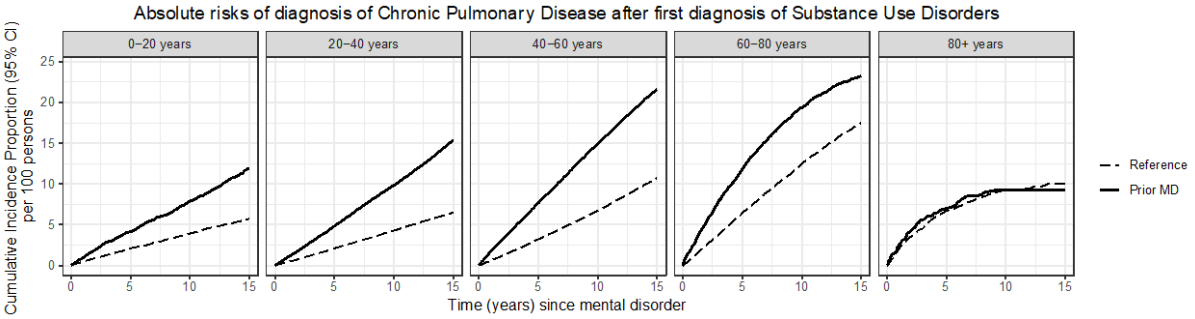


Figure S124.12 – Allergy

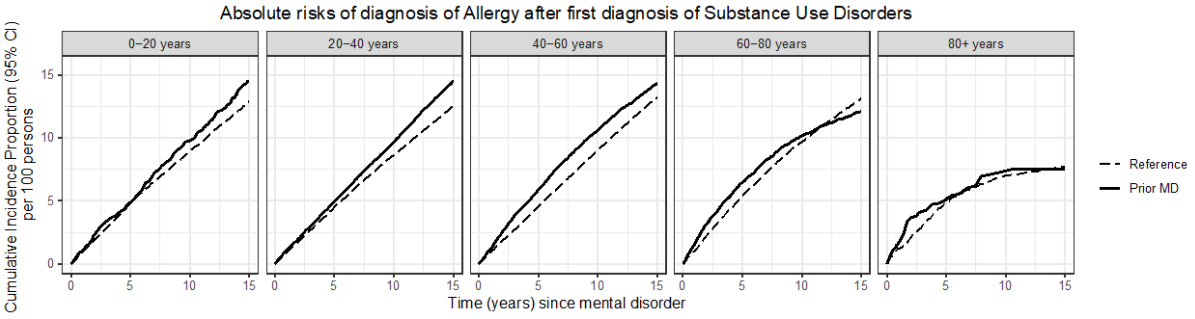


Figure S124.13 – Ulcer/Chronic Gastritis

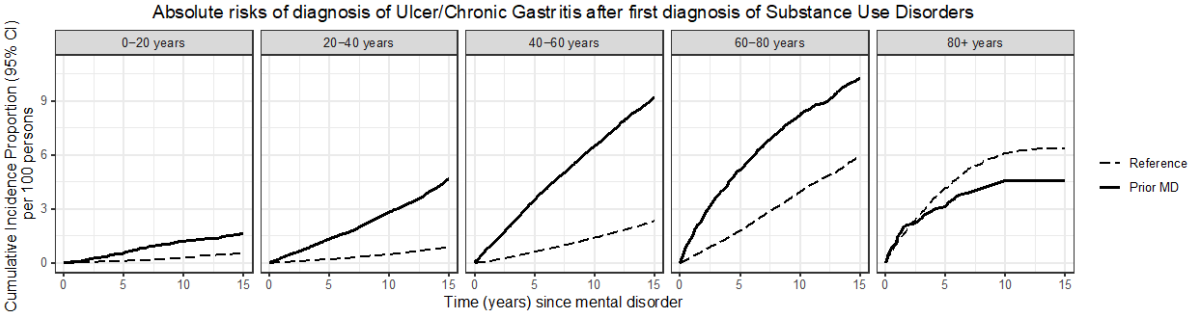


Figure S124.14 – Chronic Liver Disease

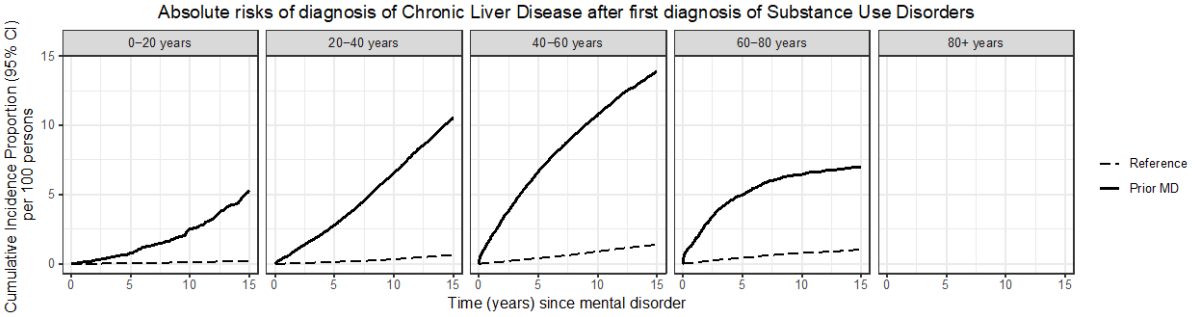


Figure S124.15 – Inflammatory Bowel Disease

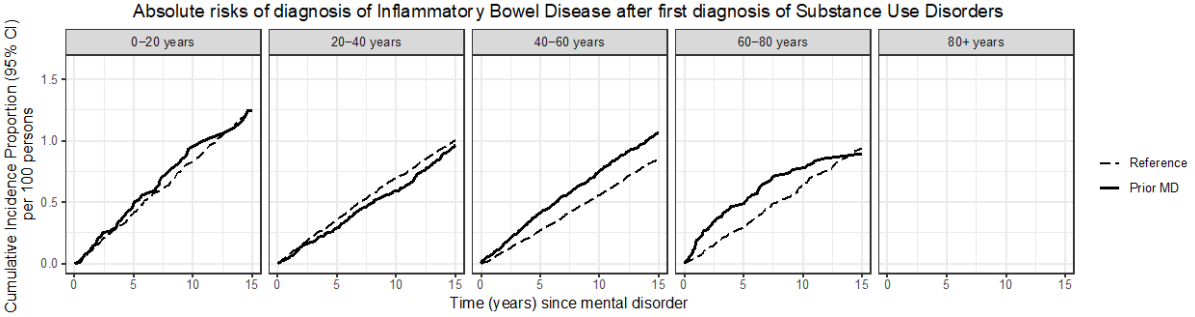


Figure S124.16 – Diverticular Disease of the Intestine

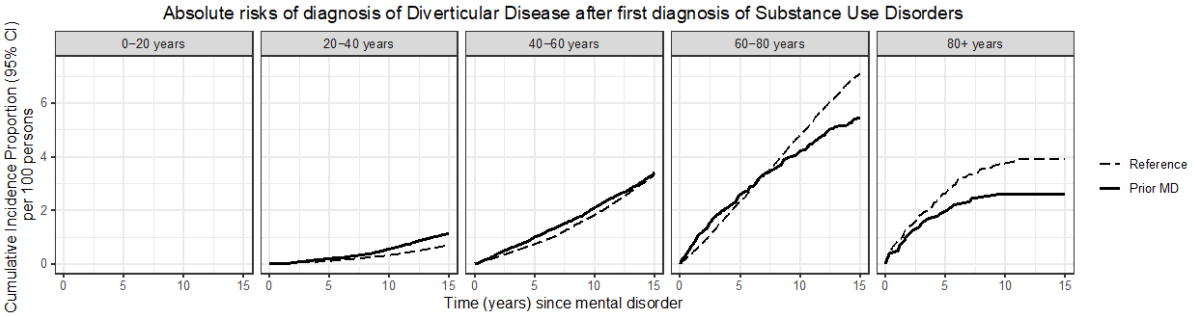


Figure S124.17 – Chronic Kidney Disease

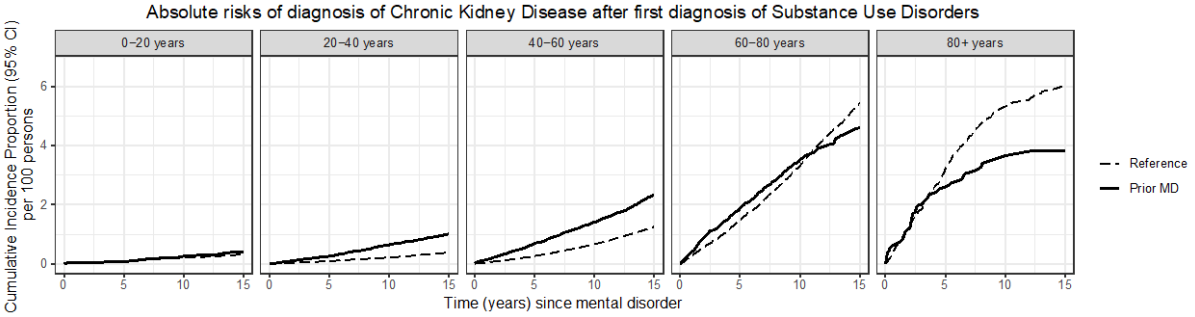


Figure S124.18 – Prostate Disorders

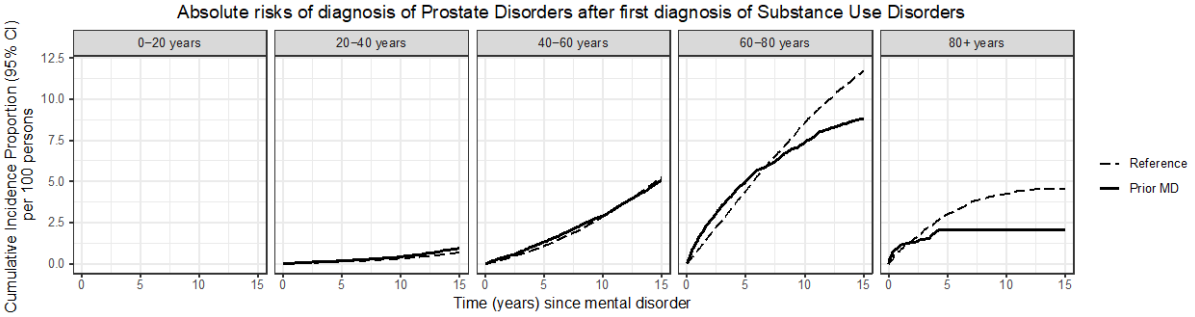


Figure S124.19 – Connective Tissue Disorders

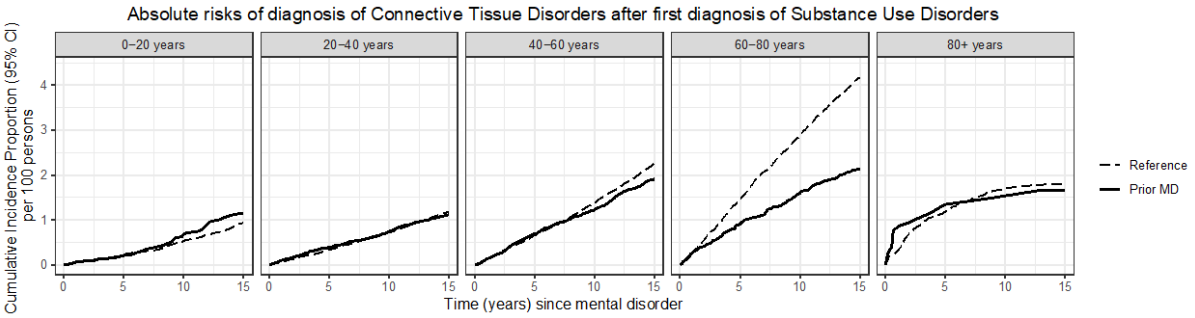


Figure S124.20 – Osteoporosis

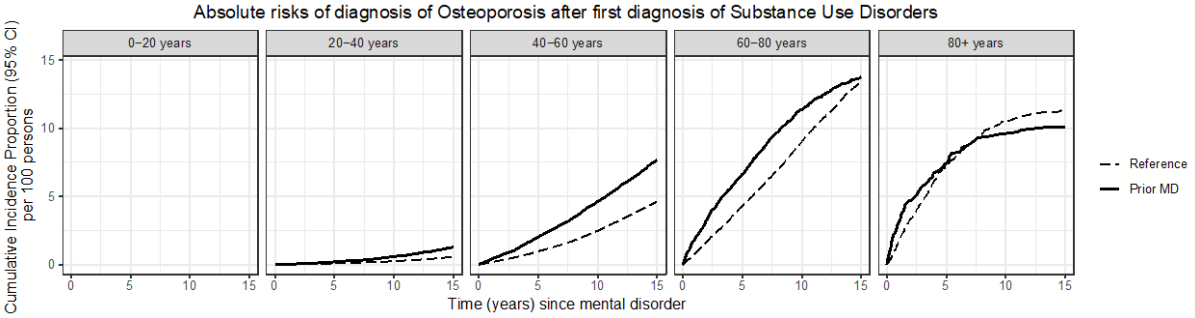


Figure S124.21 – Painful Conditions

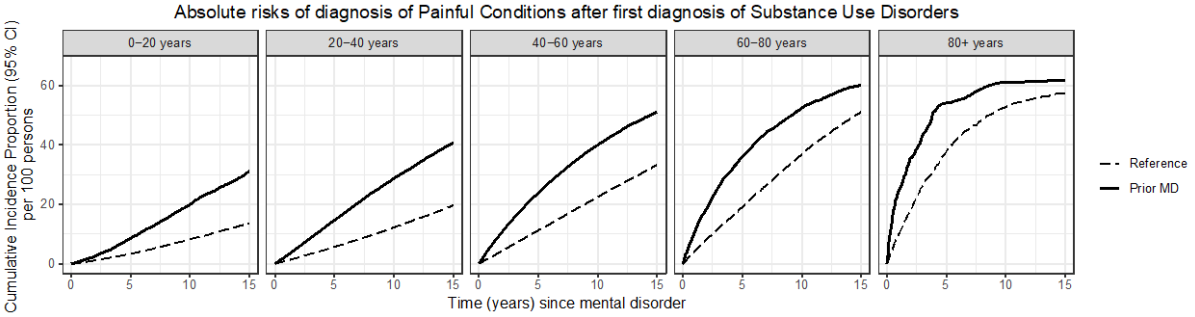


Figure S124.22 – HIV/AIDS

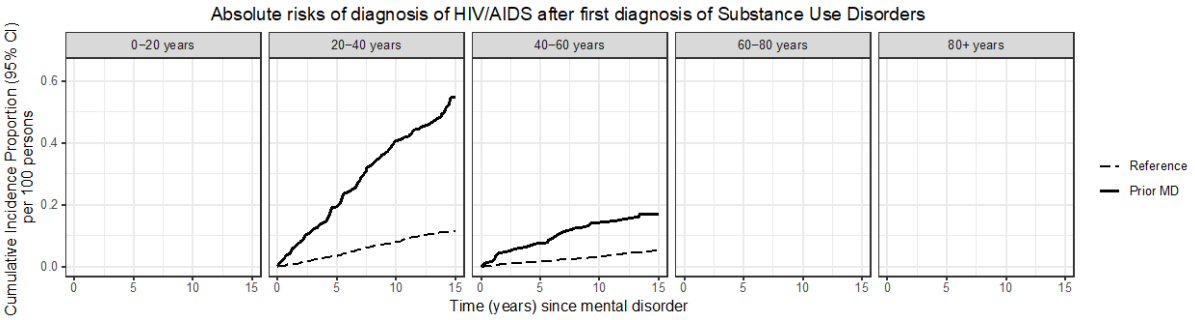


Figure S124.23 – Anemias

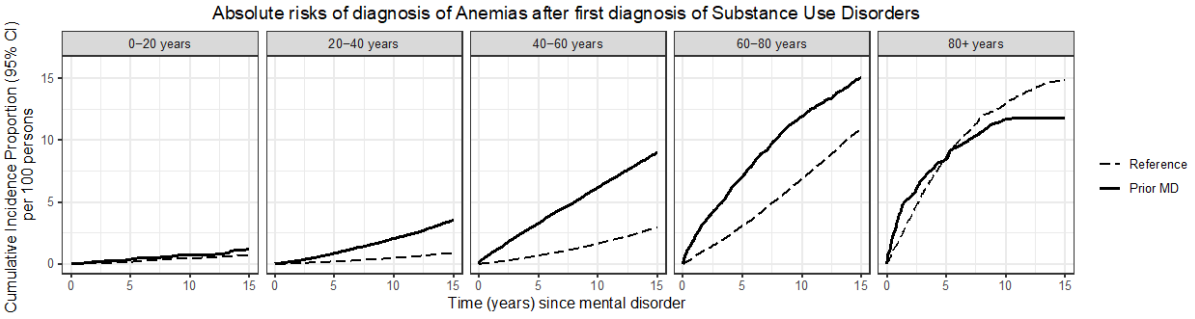


Figure S124.24 – Cancer

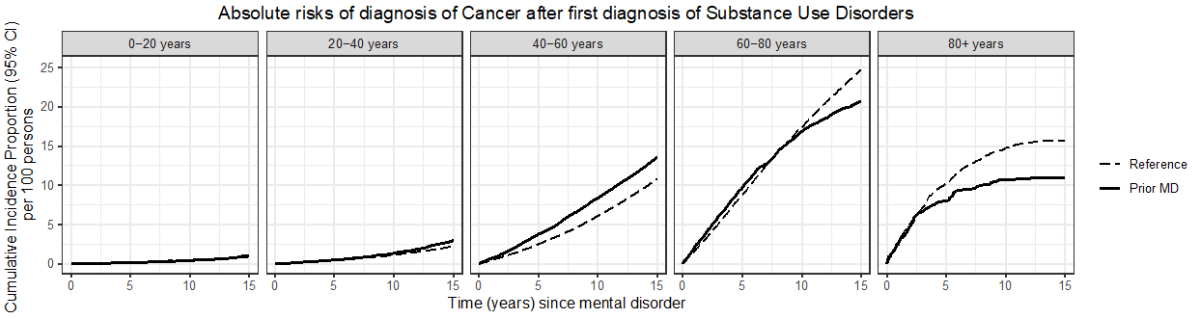


Figure S124.25 – Vision Problems

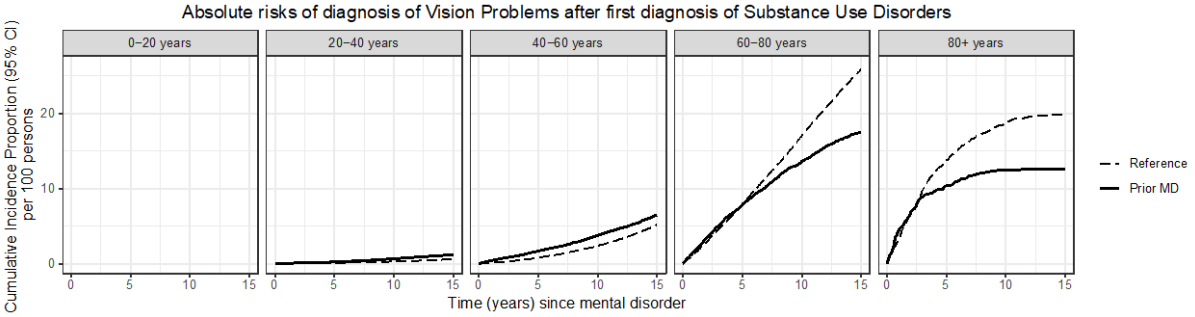


Figure S124.26 – Hearing Problems

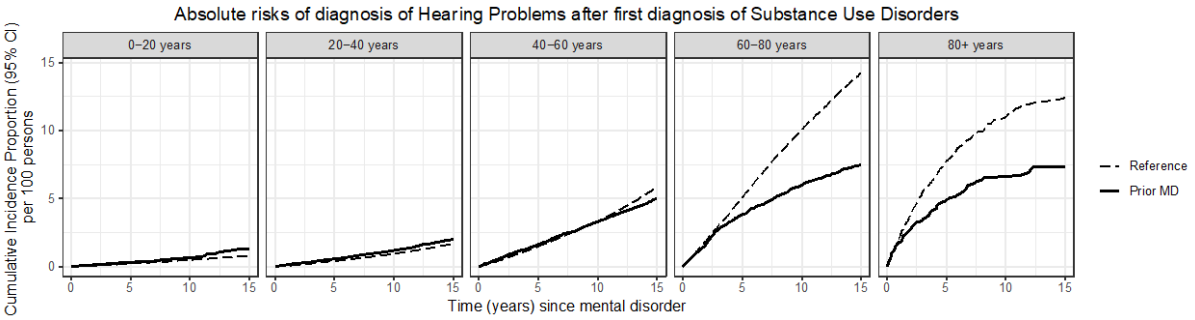


Figure S124.27 – Migraine

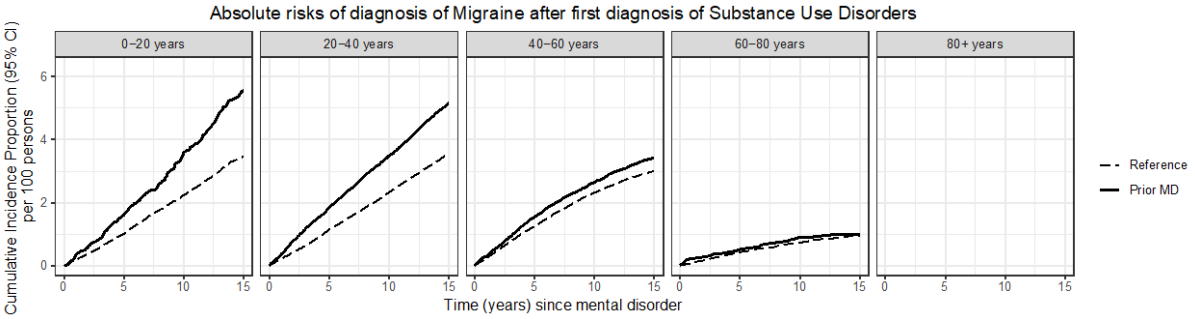


Figure S124.28 – Epilepsy

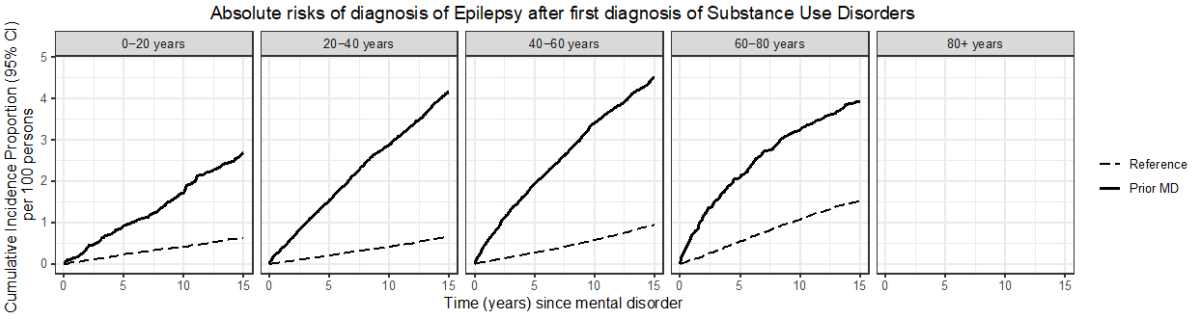


Figure S124.29 – Parkinson's Disease

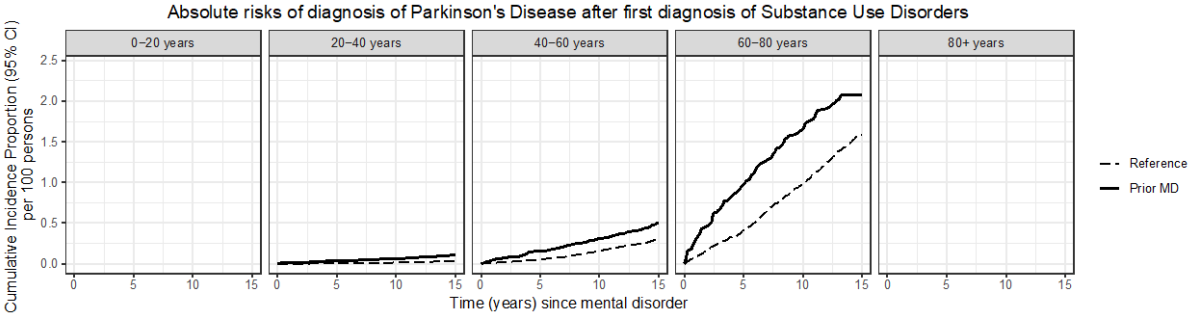


Figure S124.30 – Multiple Sclerosis

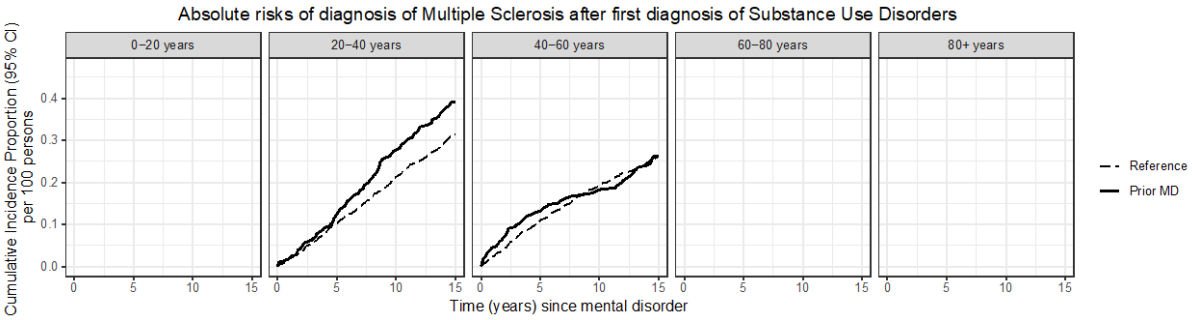
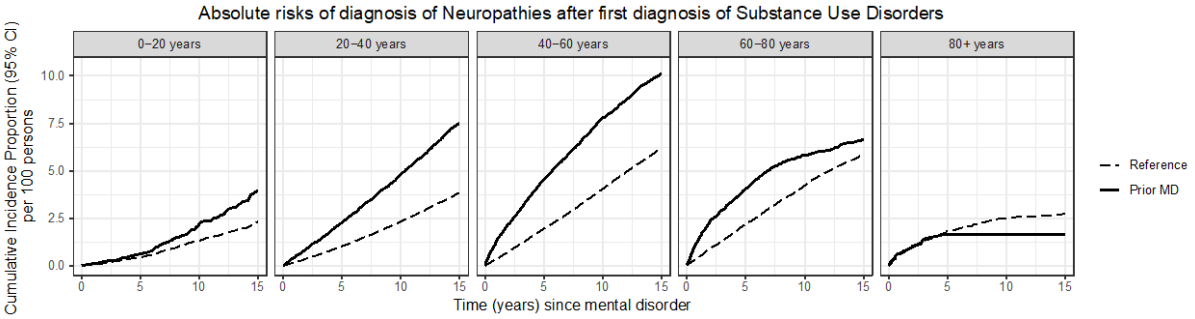


Figure S124.31 – Neuropathies



Figures S125.1-S125.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Schizophrenia

Figure S125.1 – Hypertension

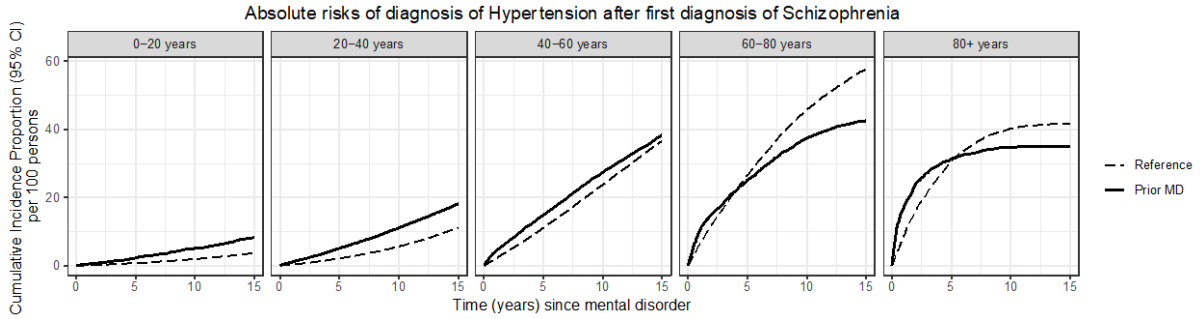


Figure S125.2 – Dyslipidemia

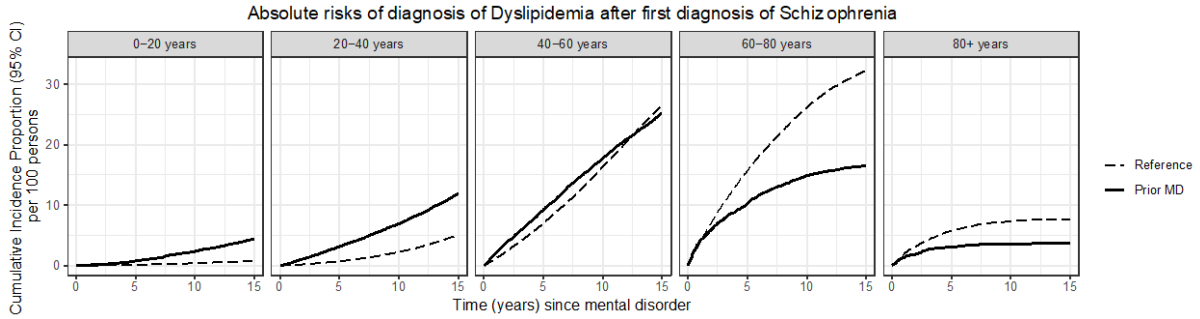


Figure S125.3 – Ischemic Heart Disease

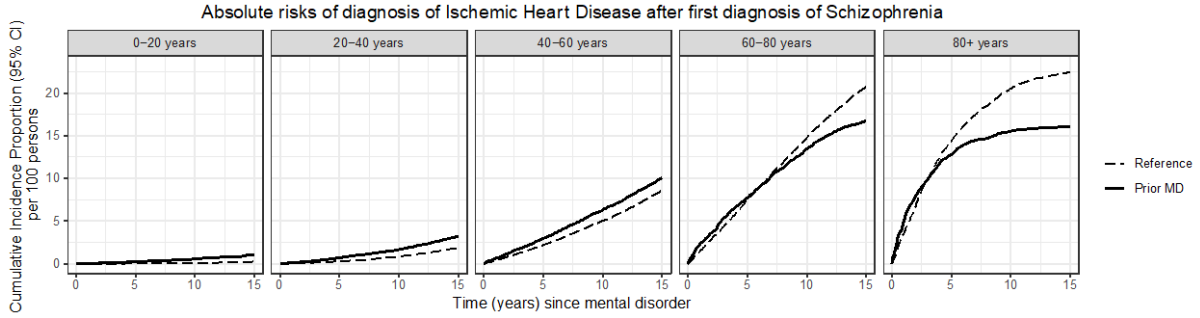


Figure S125.4 – Atrial Fibrillation

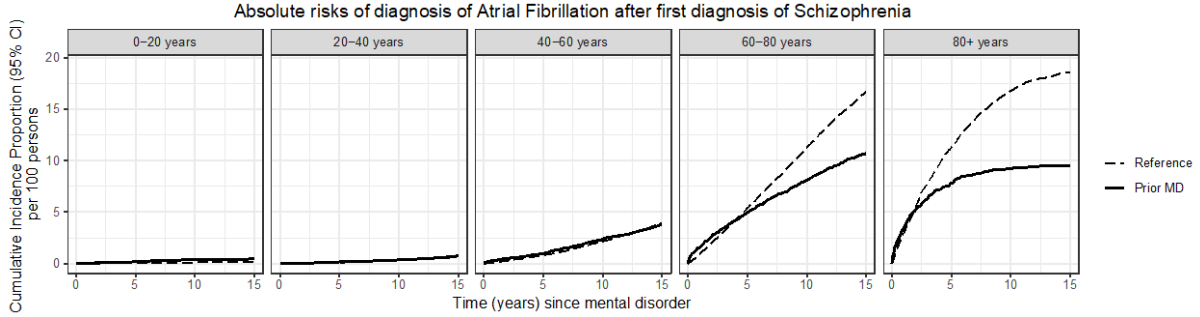


Figure S125.5 – Heart Failure

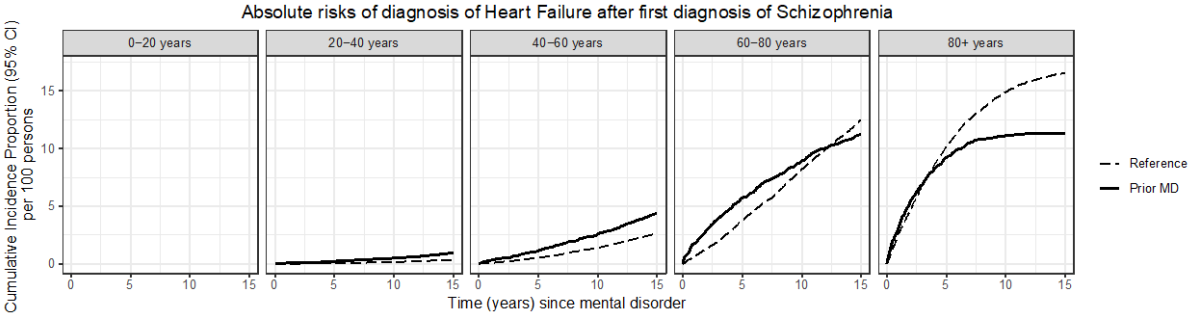


Figure S125.6 – Peripheral Artery Occlusive Disease

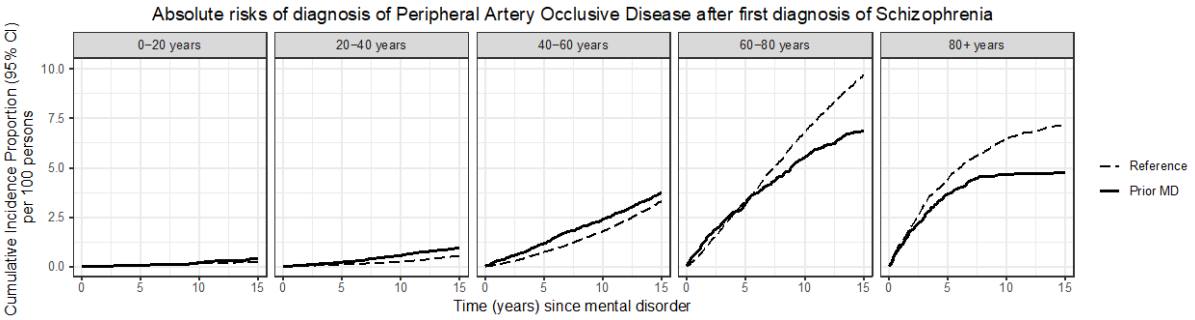


Figure S125.7 – Stroke

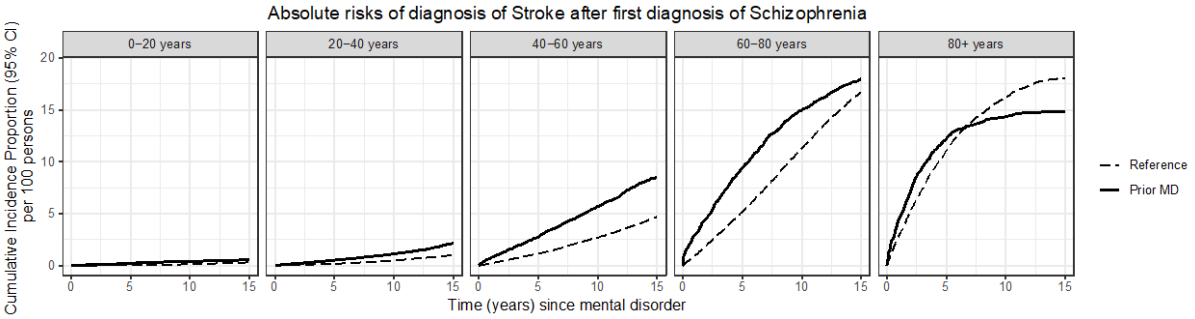


Figure S125.8 – Diabetes Mellitus

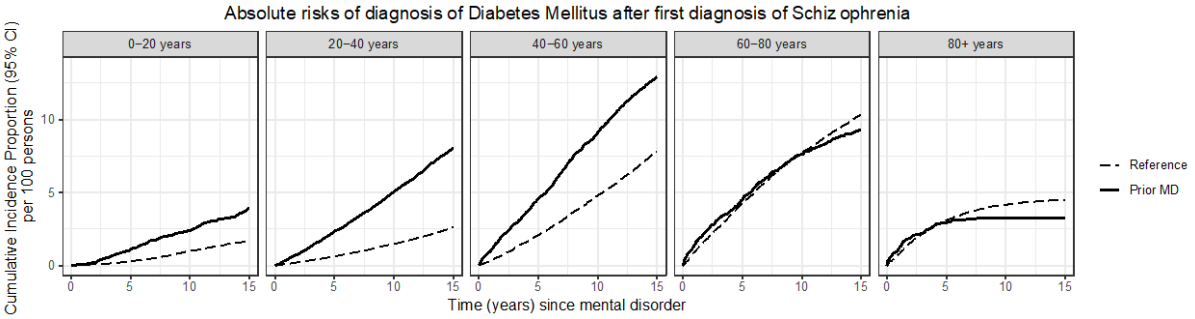


Figure S125.9 – Thyroid Disorders

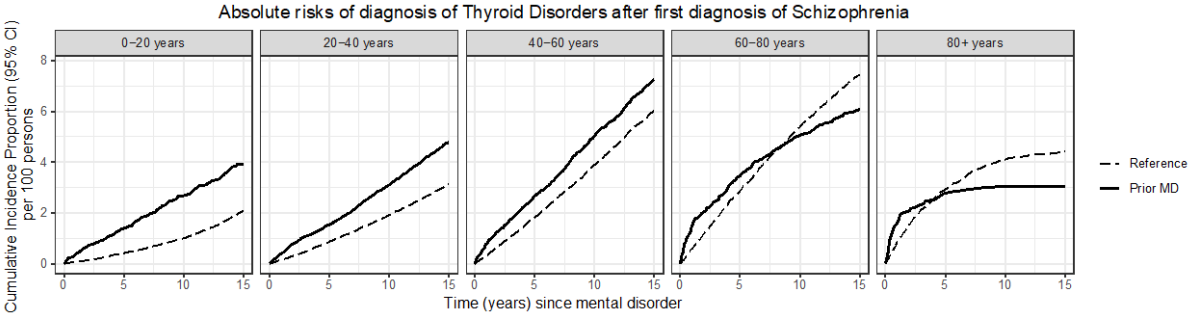


Figure S125.10 – Gout

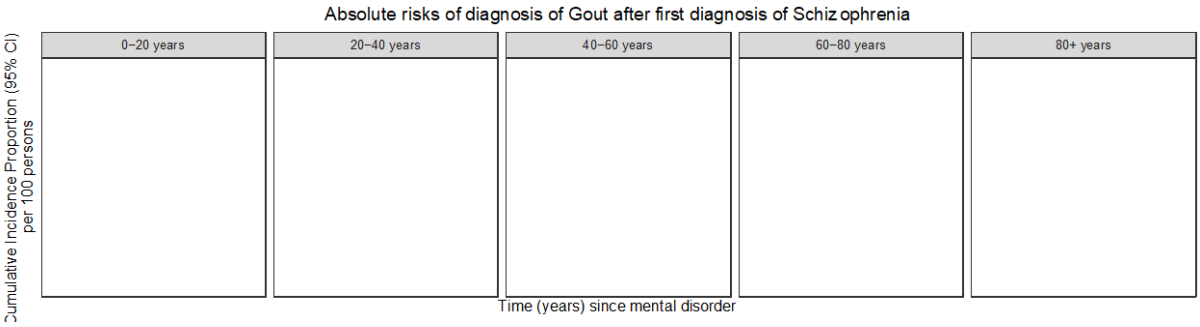


Figure S125.11 – Chronic Pulmonary Disease

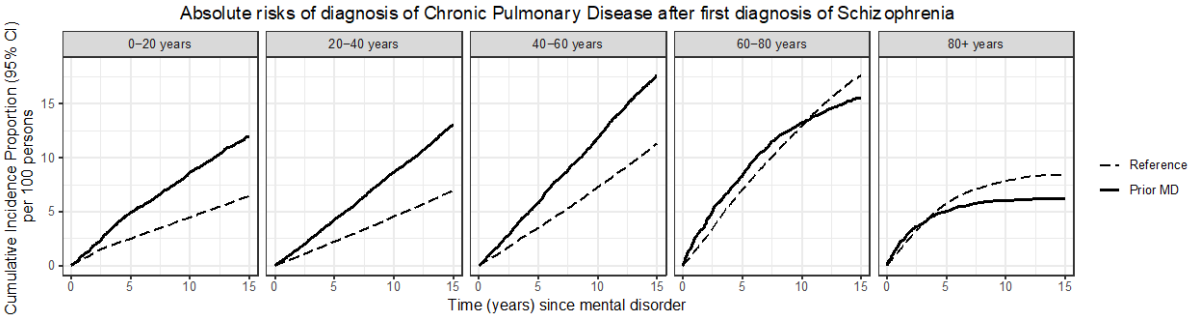


Figure S125.12 – Allergy

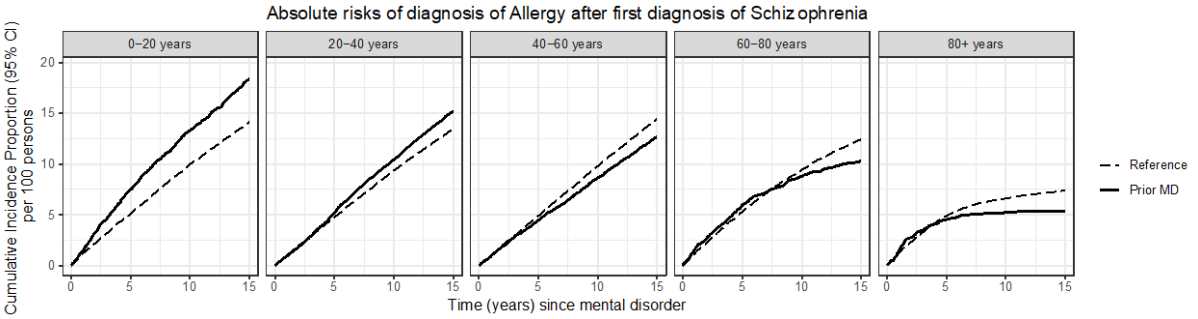


Figure S125.13 – Ulcer/Chronic Gastritis

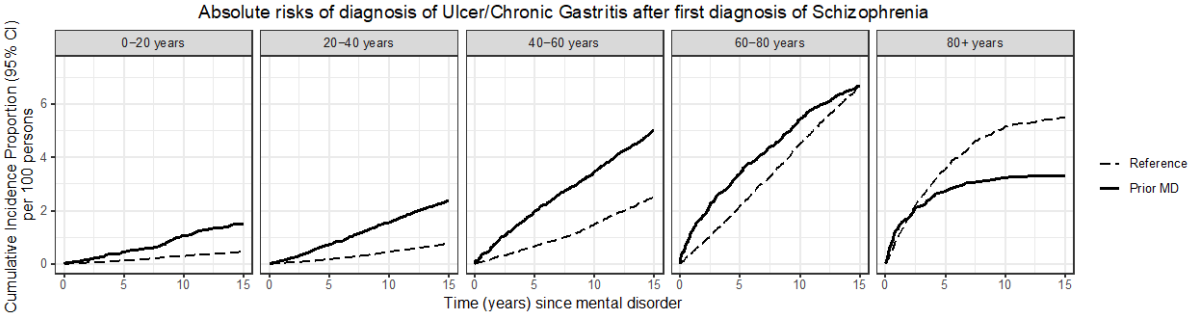


Figure S125.14 – Chronic Liver Disease

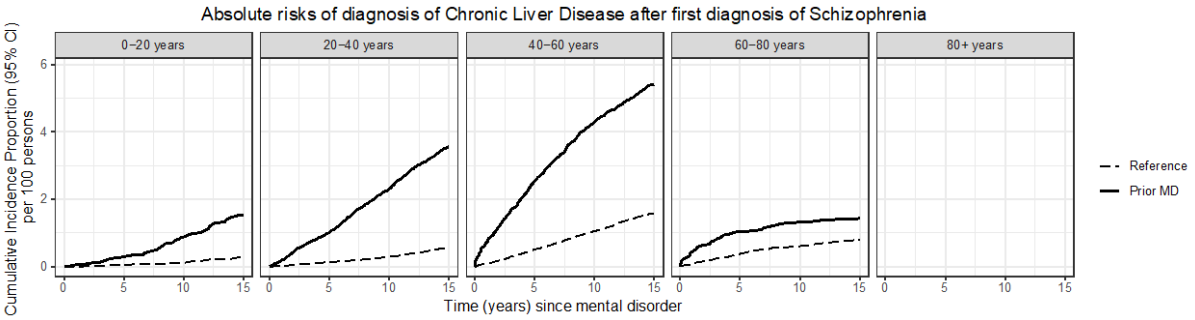


Figure S125.15 – Inflammatory Bowel Disease

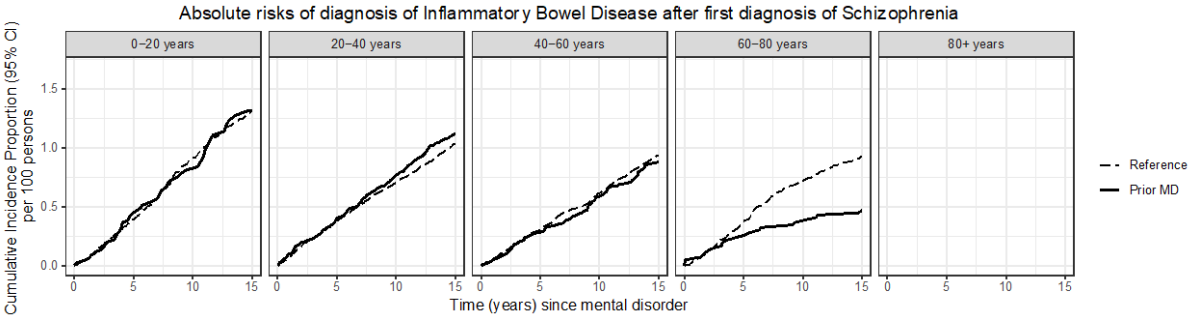


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Figure S125.16 – Diverticular Disease of the Intestine

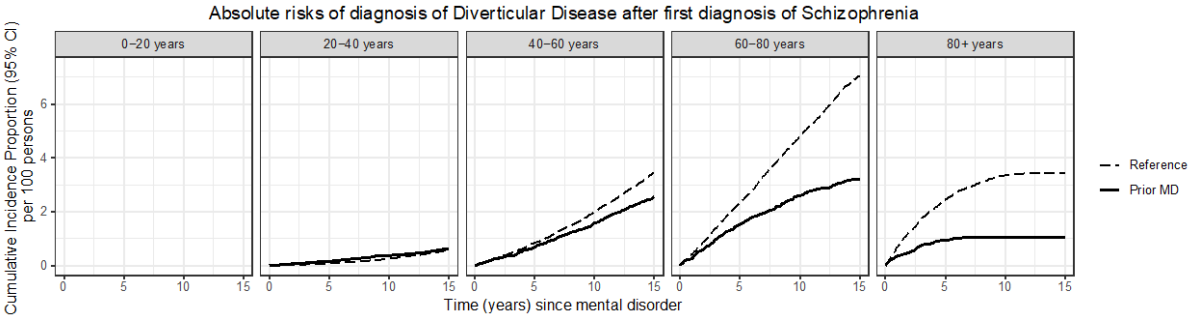


Figure S125.17 – Chronic Kidney Disease

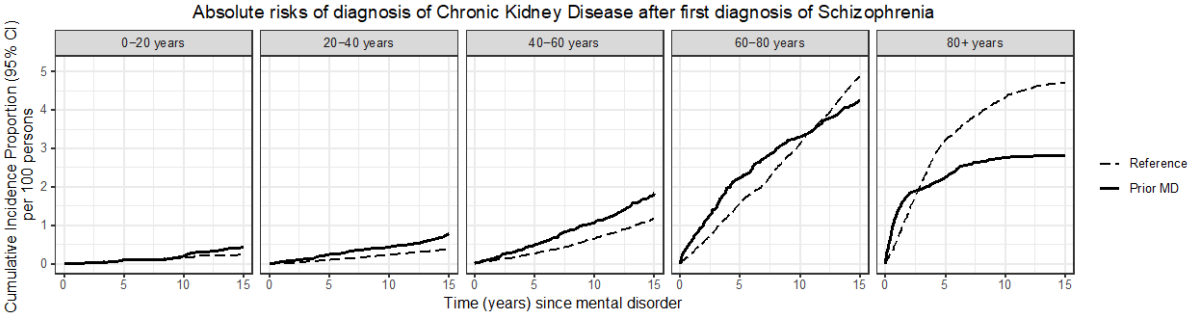


Figure S125.18 – Prostate Disorders

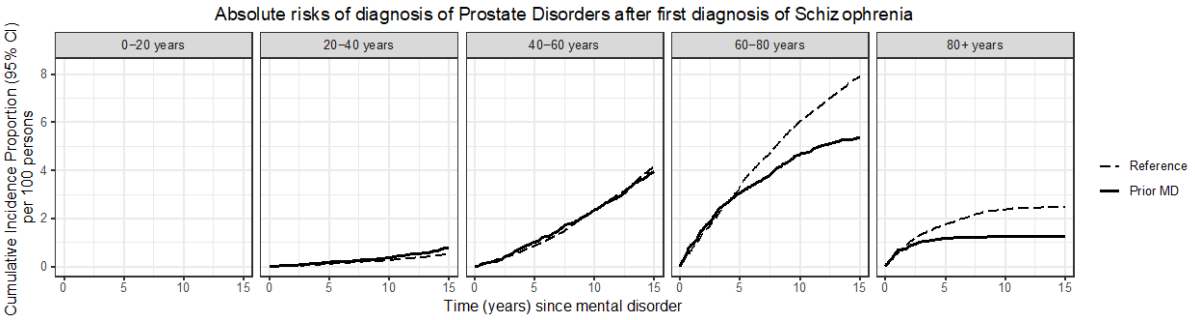


Figure S125.19 – Connective Tissue Disorders

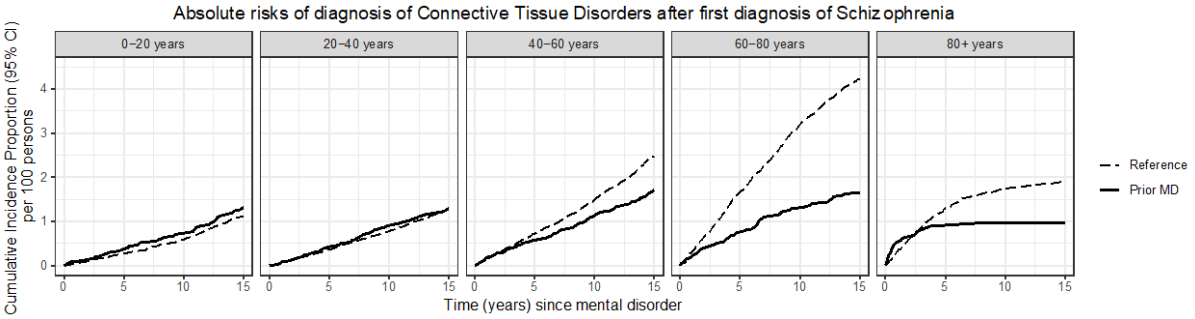


Figure S125.20 – Osteoporosis

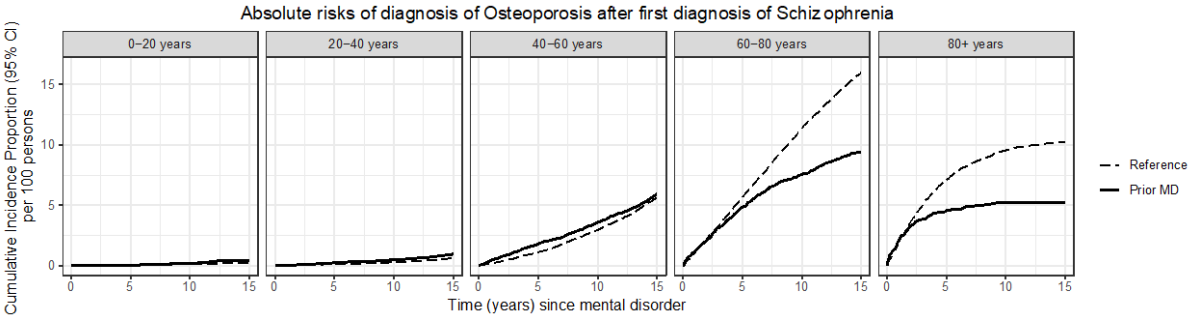


Figure S125.21 – Painful Conditions

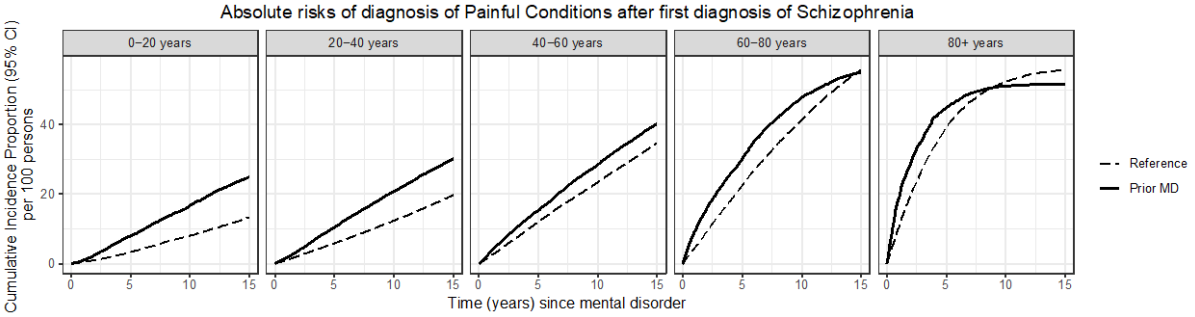


Figure S125.22 – HIV/AIDS

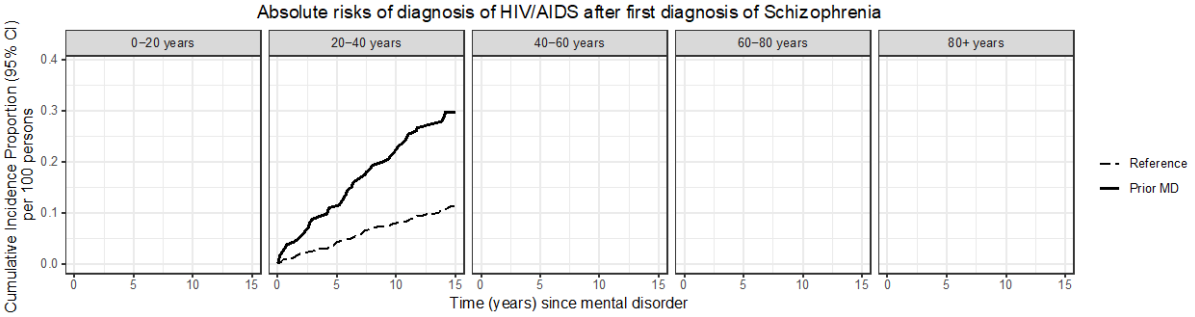


Figure S125.23 – Anemias

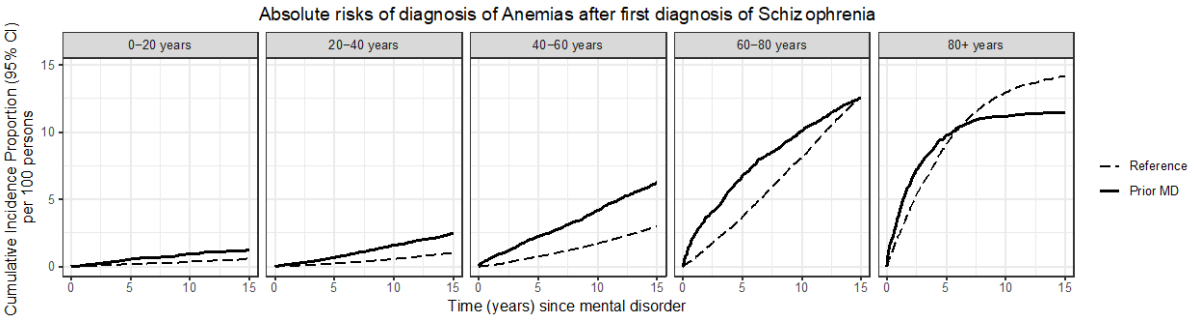


Figure S125.24 – Cancer

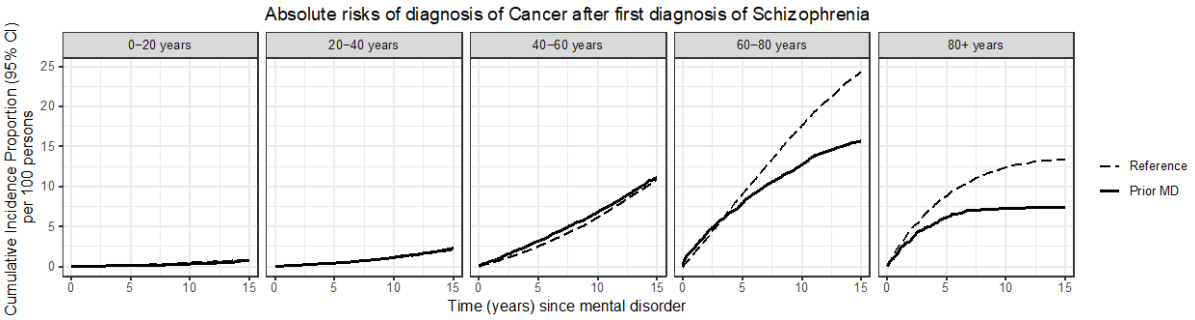


Figure S125.25 – Vision Problems

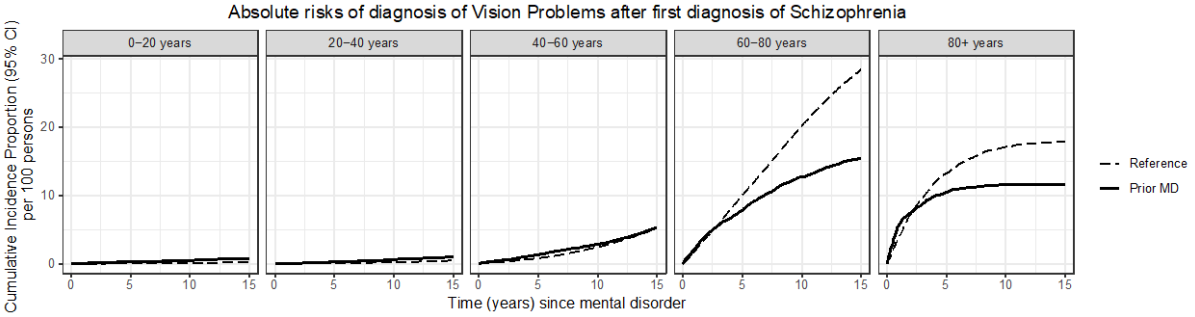


Figure S125.26 – Hearing Problems

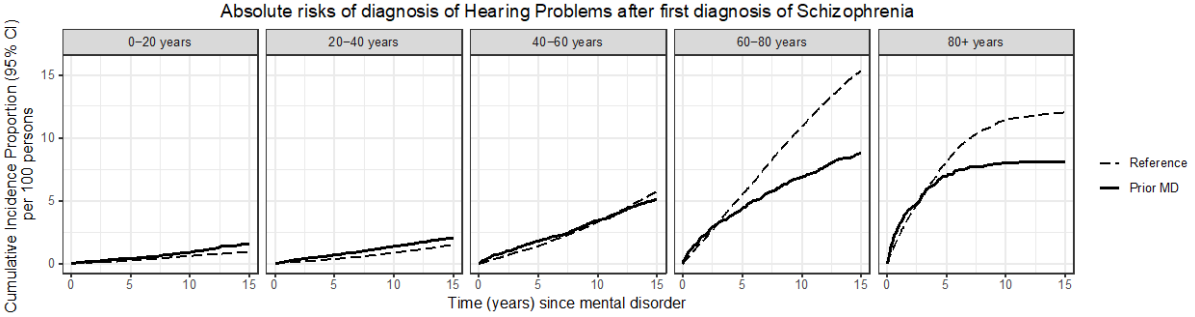


Figure S125.27 – Migraine

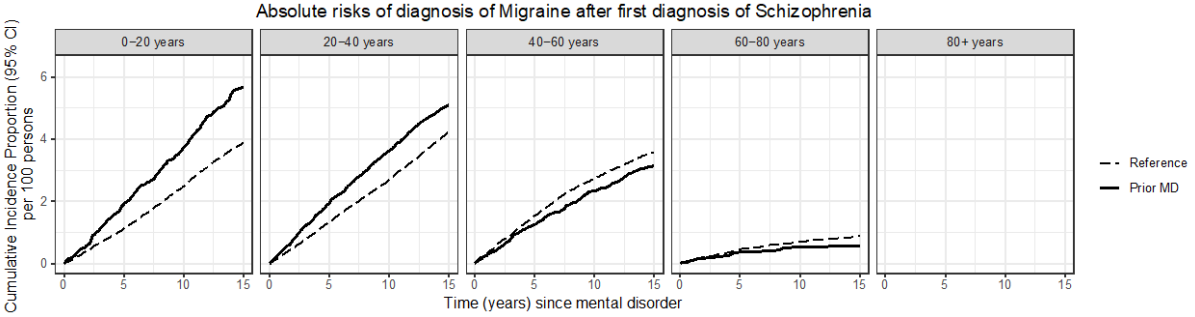


Figure S125.28 – Epilepsy

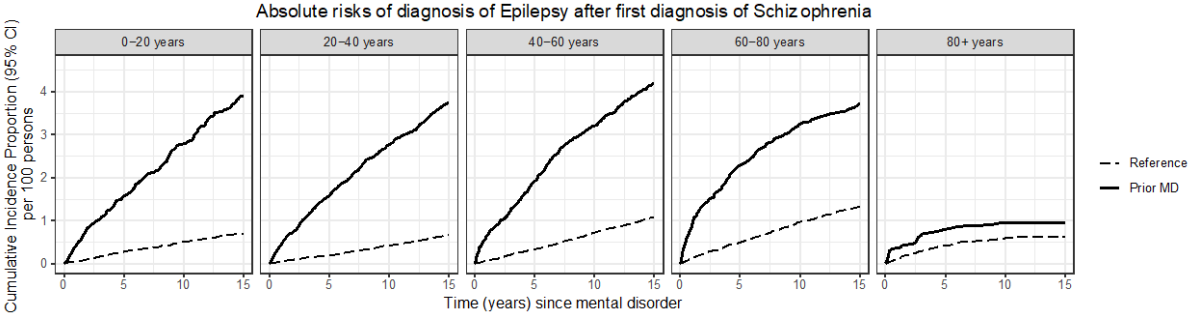


Figure S125.29 – Parkinson's Disease

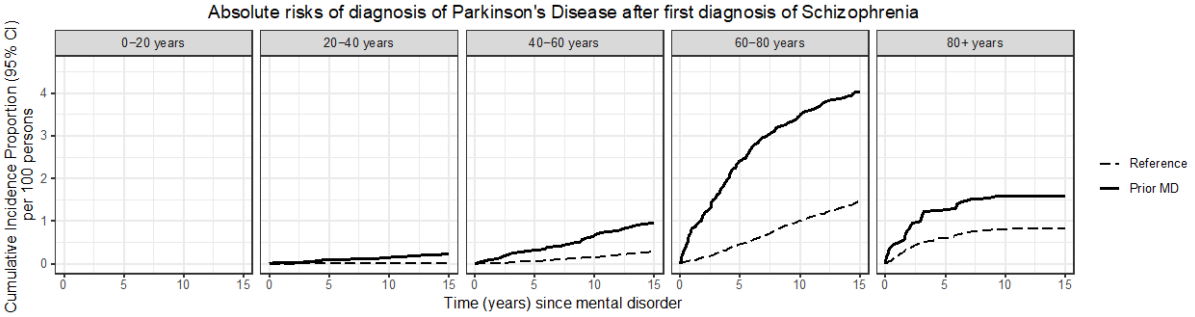


Figure S125.30 – Multiple Sclerosis

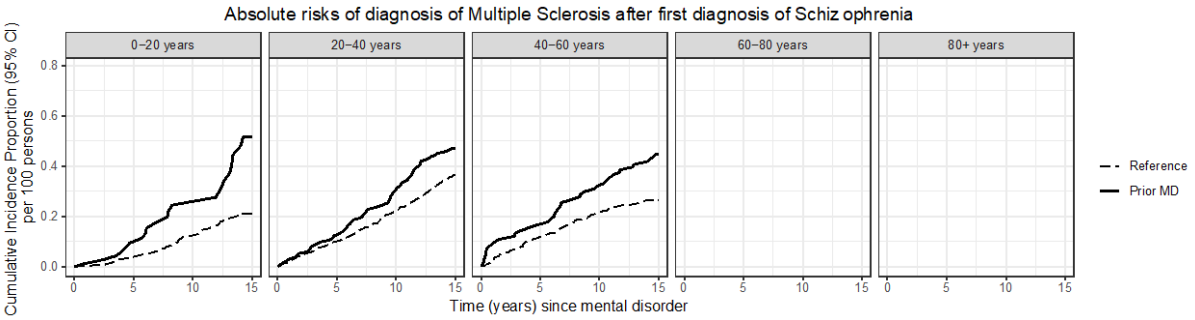
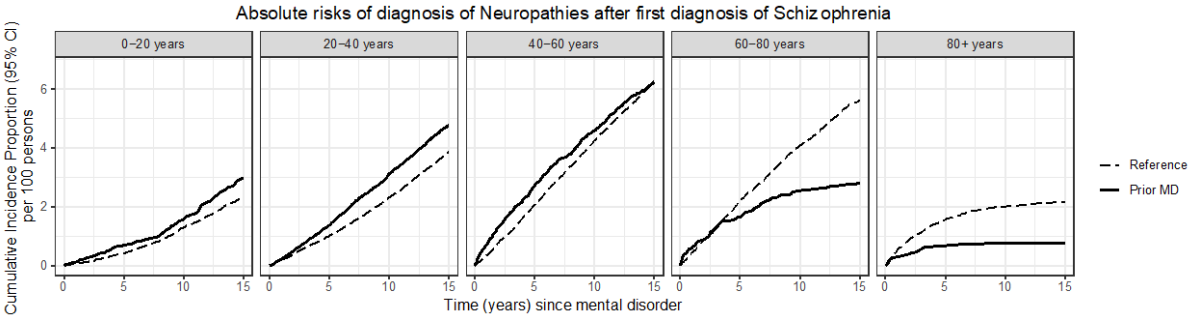


Figure S125.31 – Neuropathies



Figures S126.1-S126.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Mood Disorders

Figure S126.1 – Hypertension

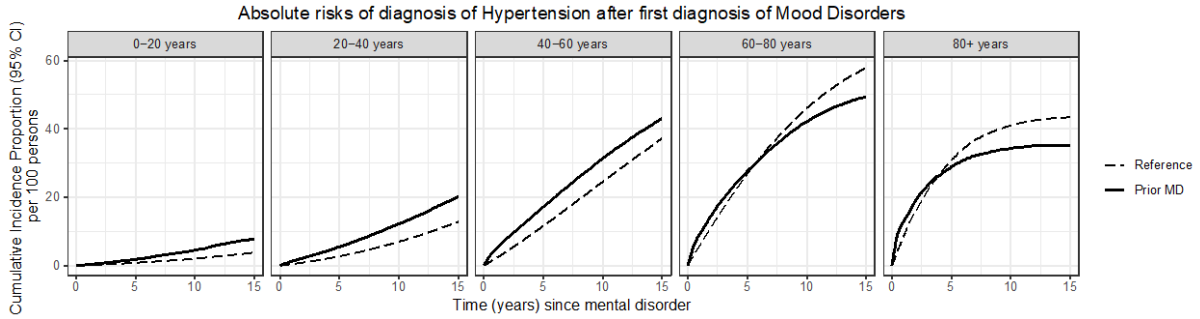


Figure S126.2 – Dyslipidemia

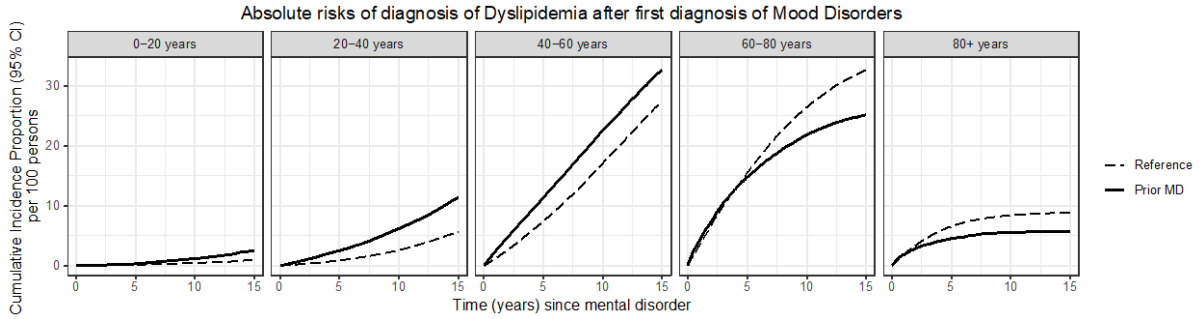


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Figure S126.3 – Ischemic Heart Disease

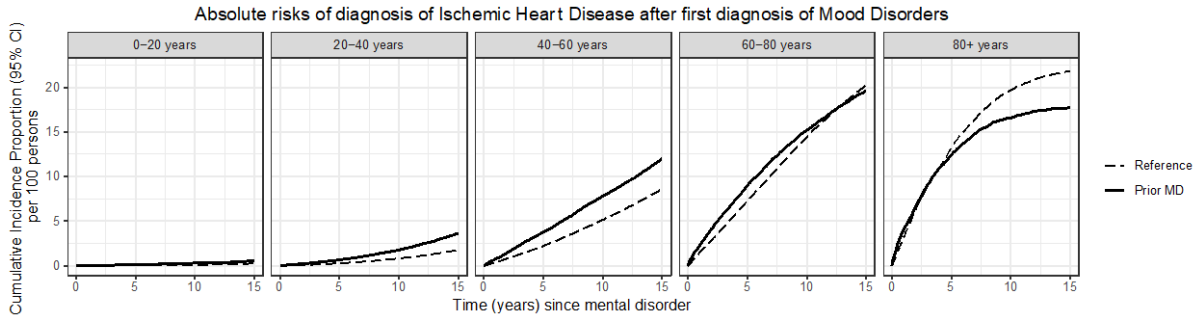


Figure S126.4 – Atrial Fibrillation

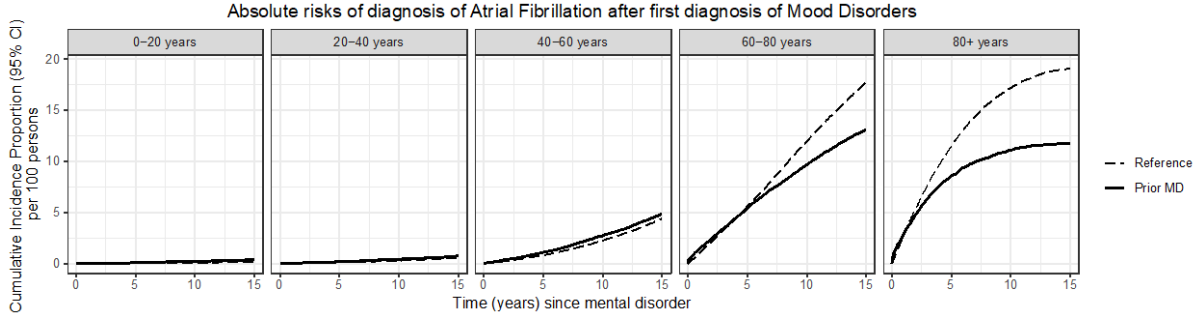


Figure S126.5 – Heart Failure

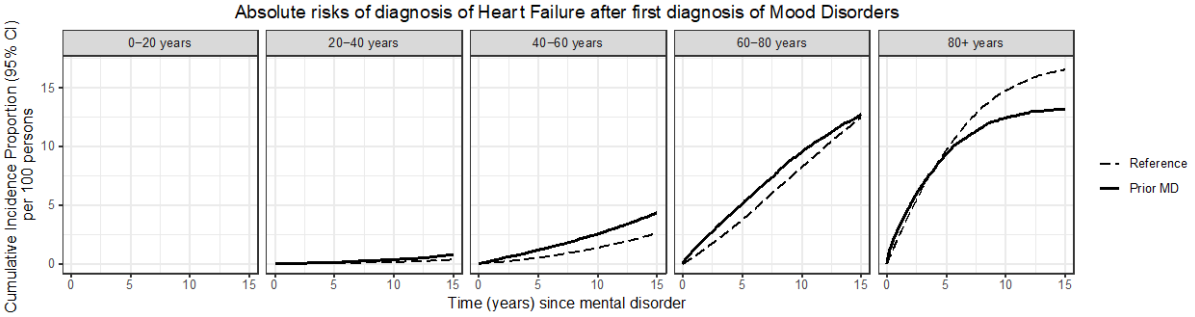


Figure S126.6 – Peripheral Artery Occlusive Disease

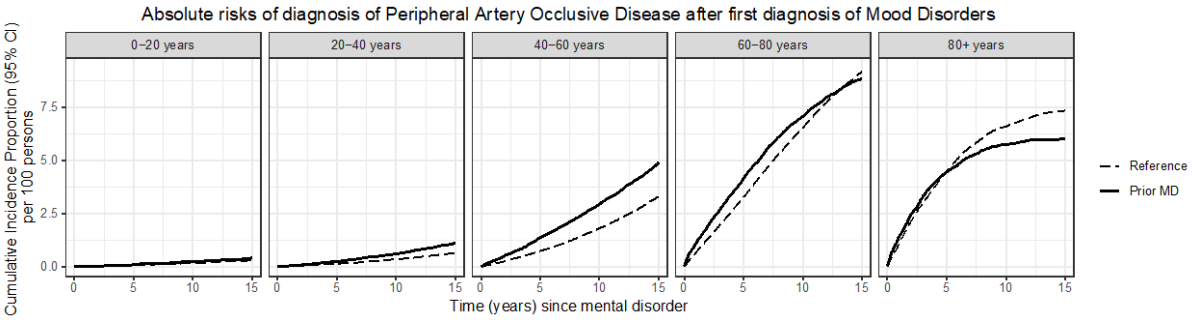


Figure S126.7 – Stroke

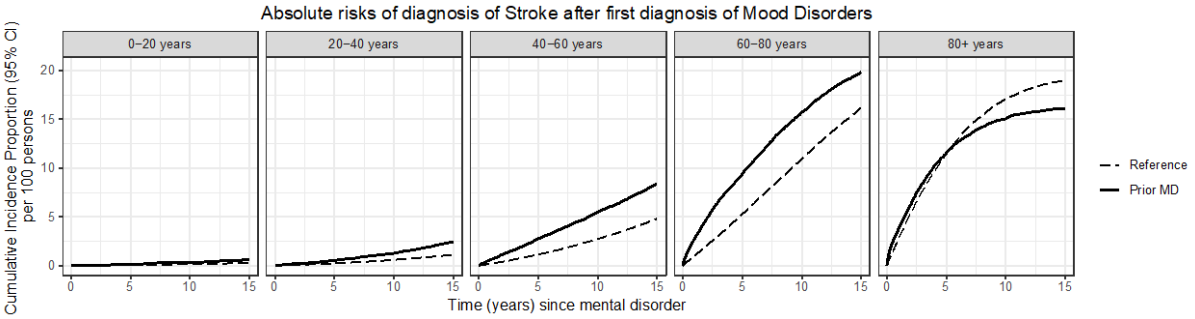


Figure S126.8 – Diabetes Mellitus

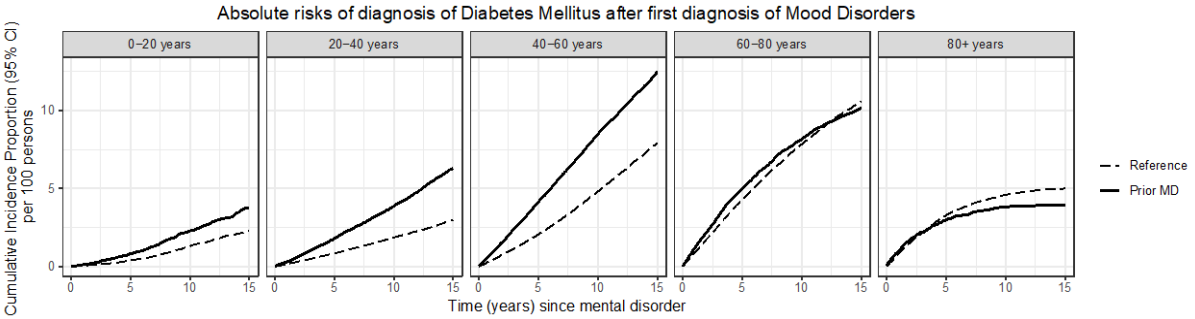


Figure S126.9 – Thyroid Disorders

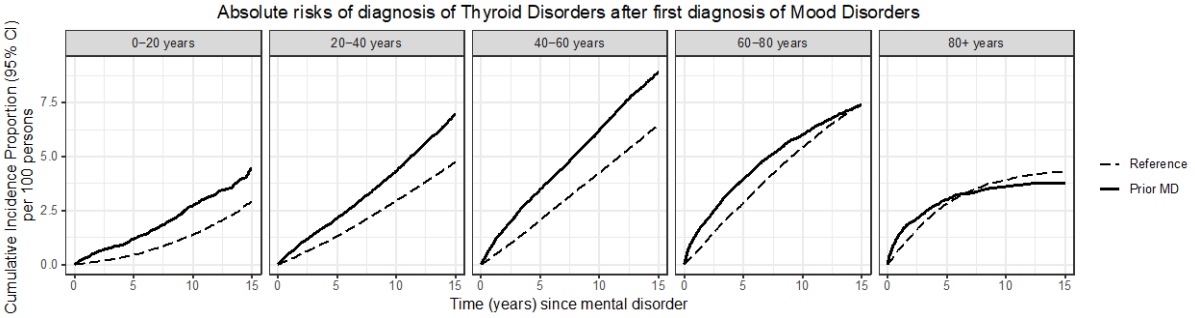


Figure S126.10 – Gout

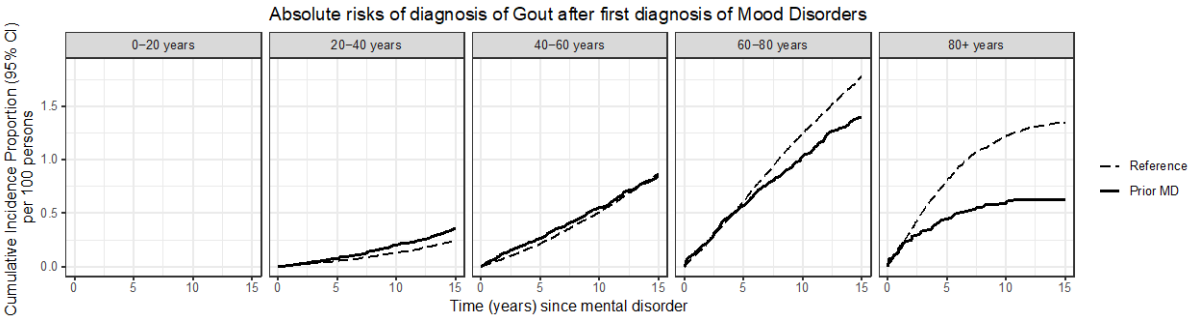


Figure S126.11 – Chronic Pulmonary Disease

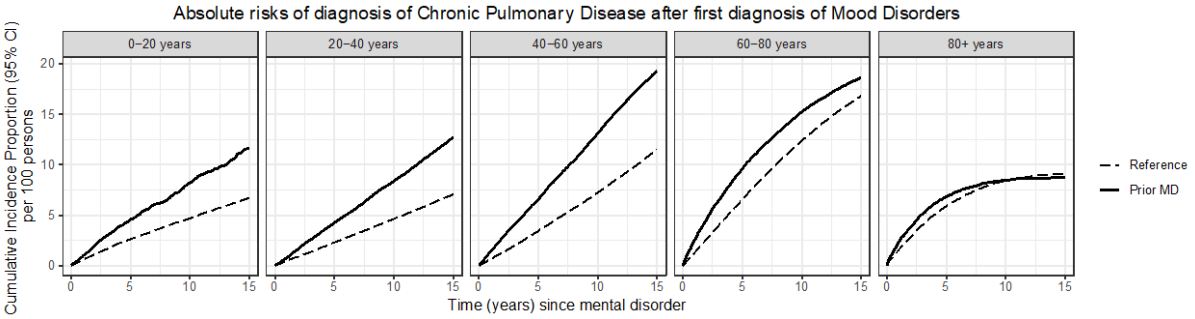


Figure S126.12 – Allergy

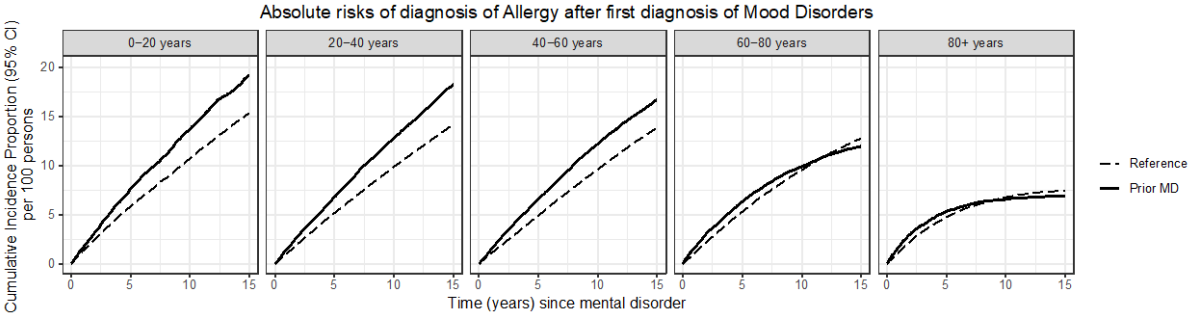


Figure S126.13 – Ulcer/Chronic Gastritis

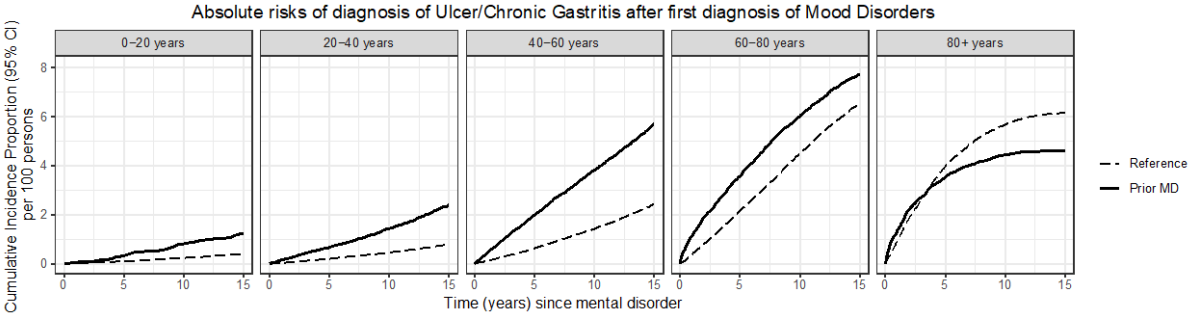


Figure S126.14 – Chronic Liver Disease

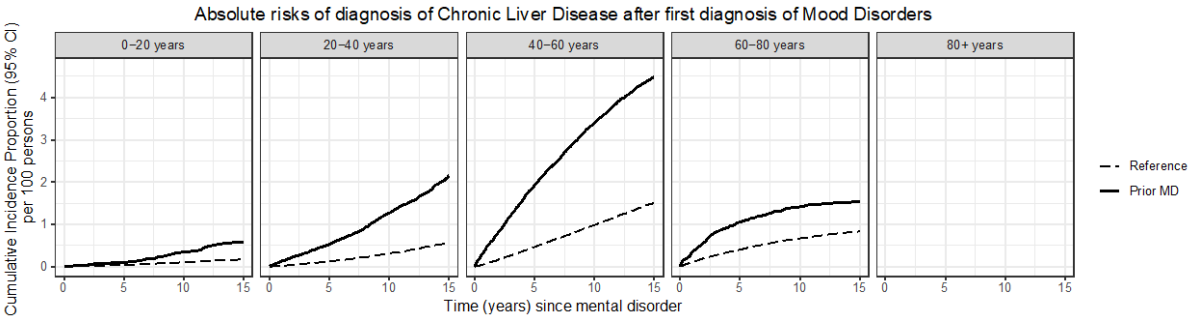


Figure S126.15 – Inflammatory Bowel Disease

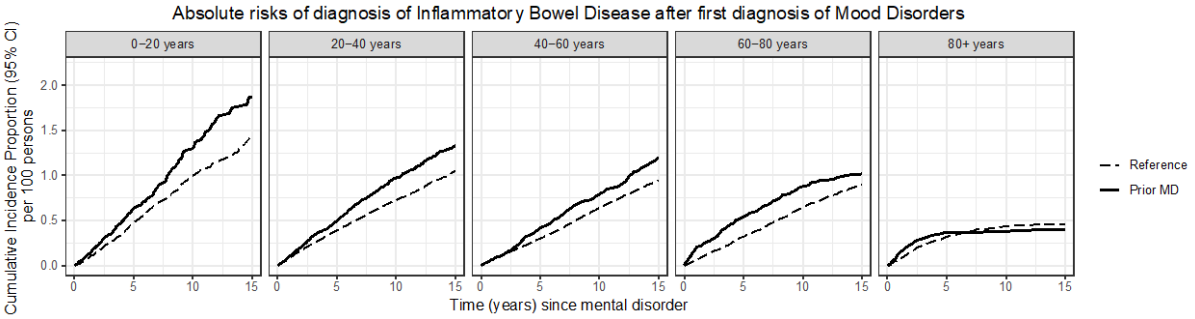


Figure S126.16 – Diverticular Disease of the Intestine

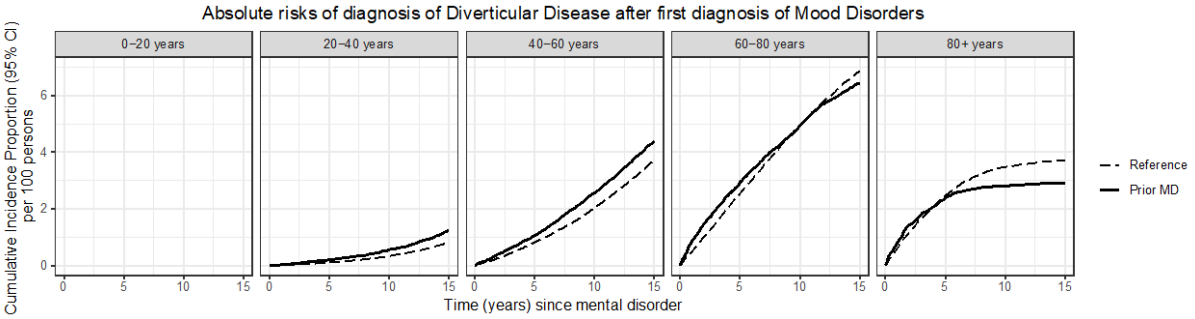


Figure S126.17 – Chronic Kidney Disease

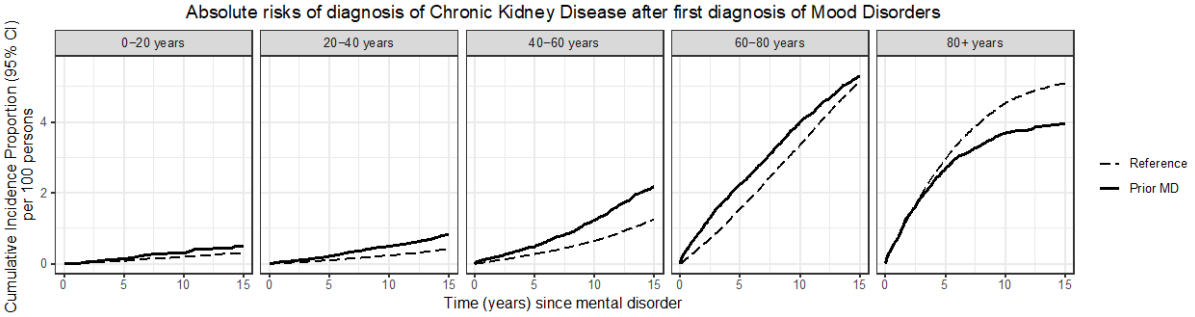


Figure S126.18 – Prostate Disorders

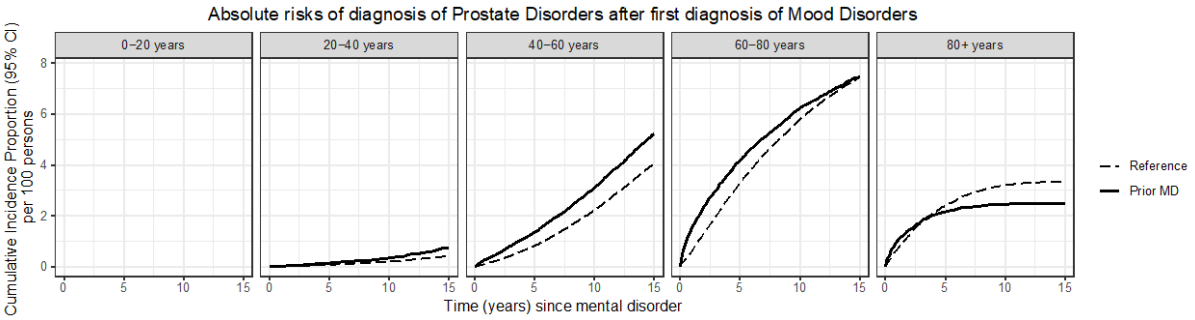


Figure S126.19 – Connective Tissue Disorders

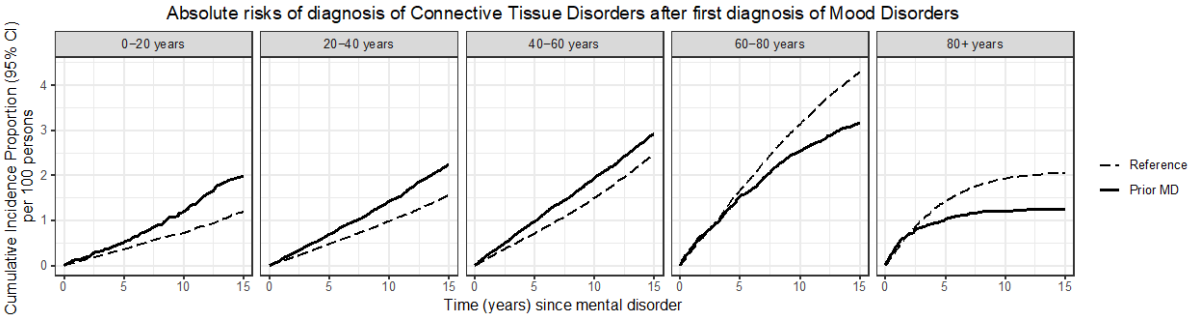


Figure S126.20 – Osteoporosis

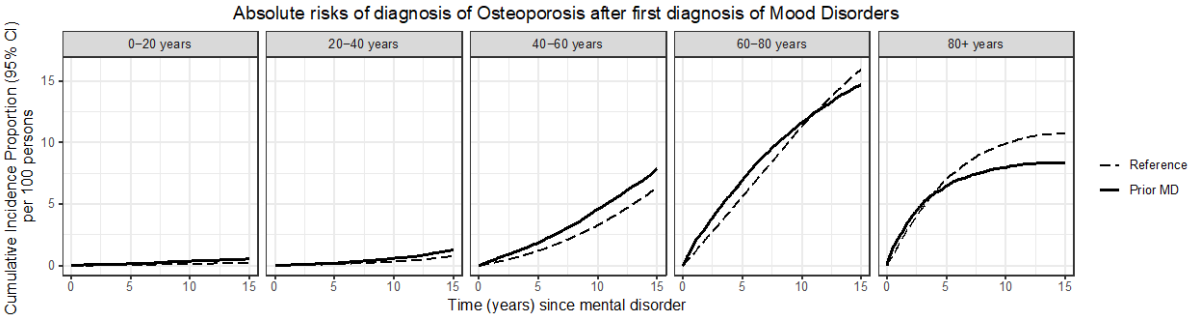


Figure S126.21 – Painful Conditions

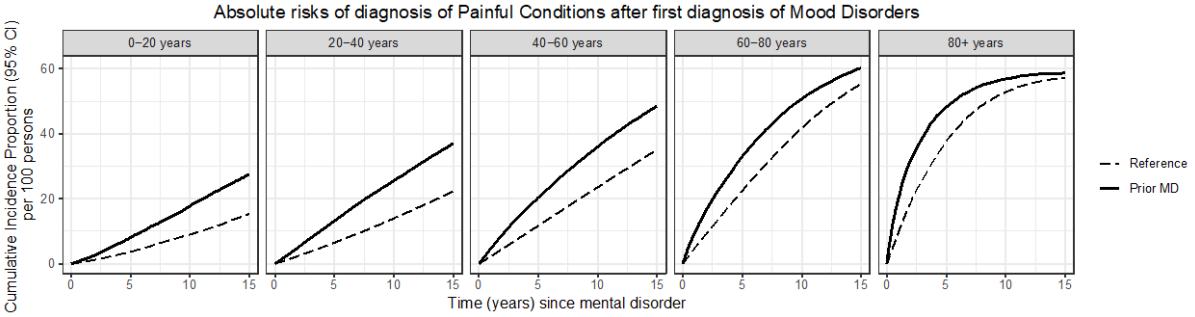


Figure S126.22 – HIV/AIDS

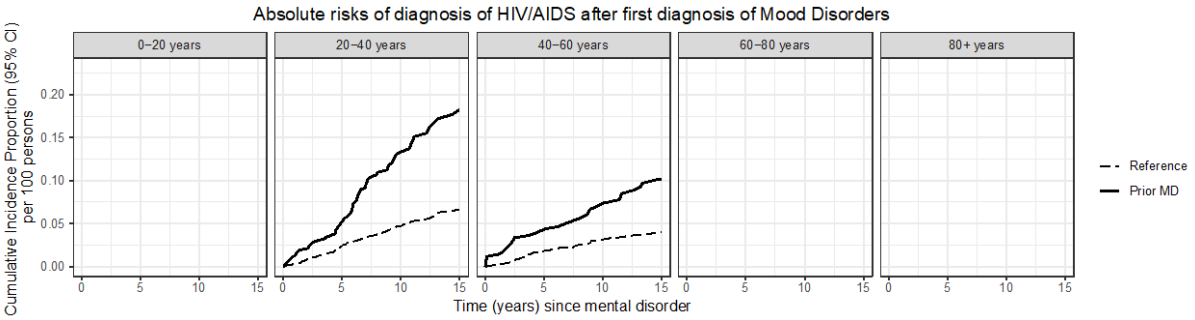


Figure S126.23 – Anemias

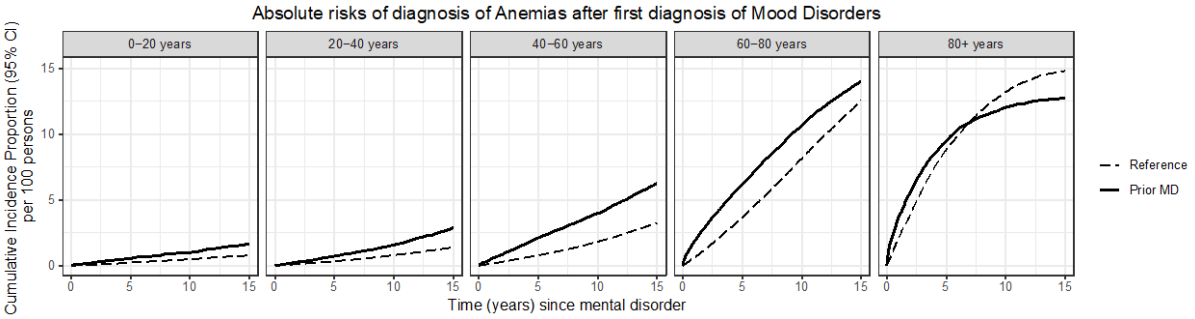


Figure S126.24 – Cancer

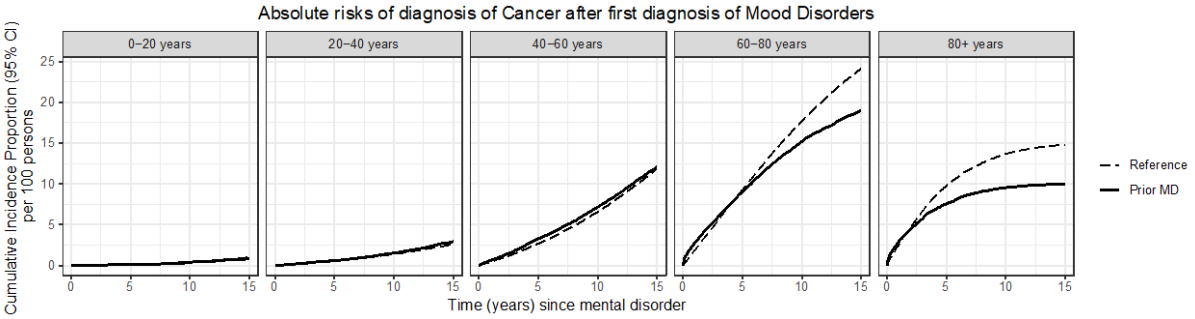


Figure S126.25 – Vision Problems

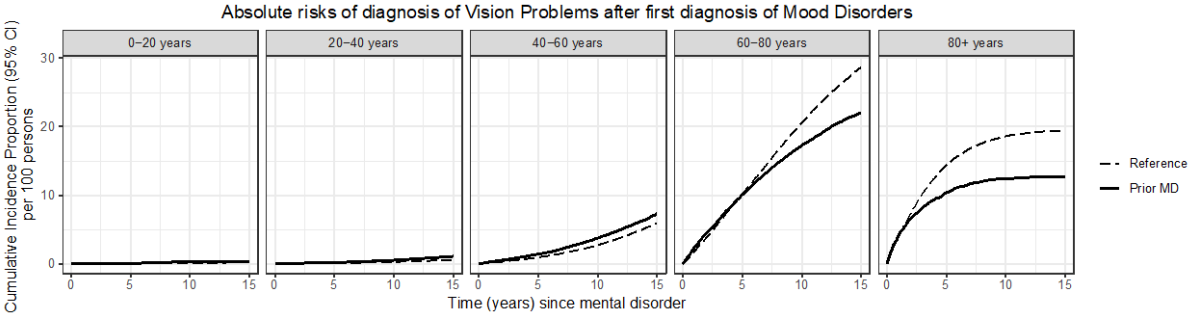


Figure S126.26 – Hearing Problems

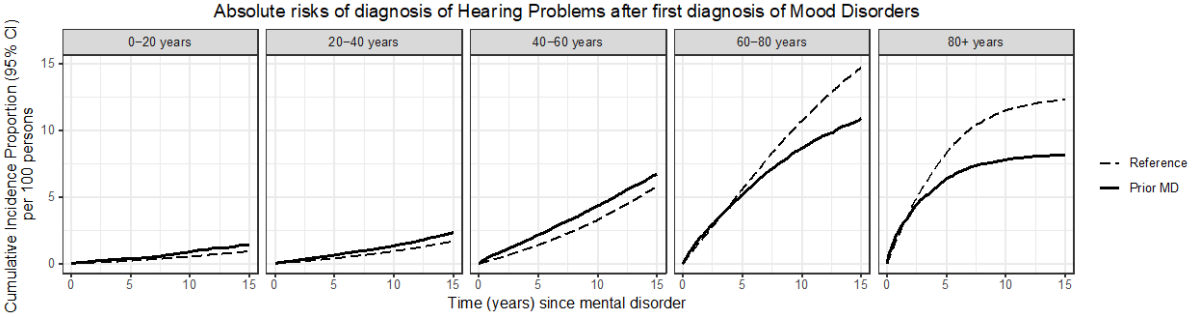


Figure S126.27 – Migraine

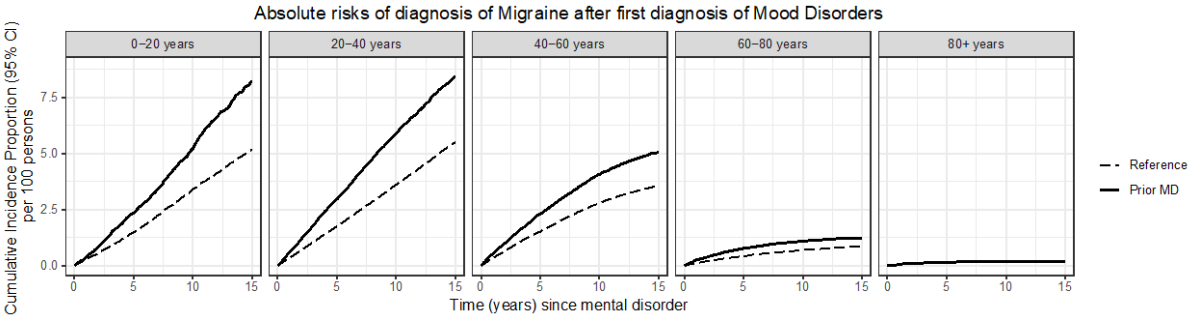


Figure S126.28 – Epilepsy

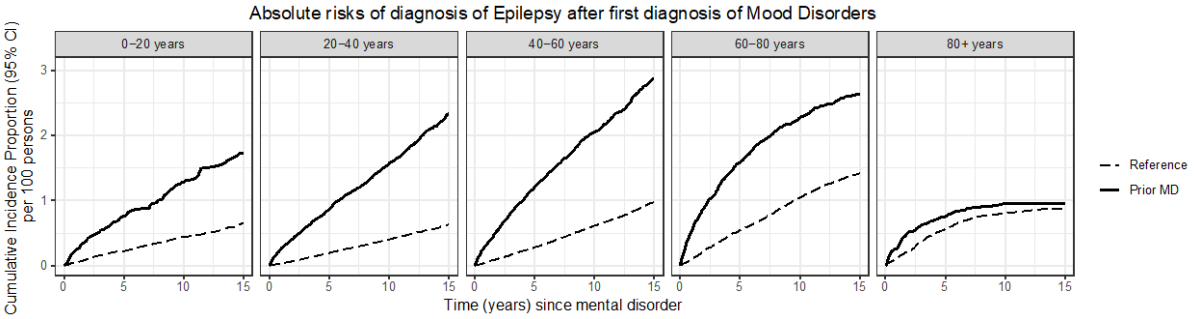


Figure S126.29 – Parkinson's Disease

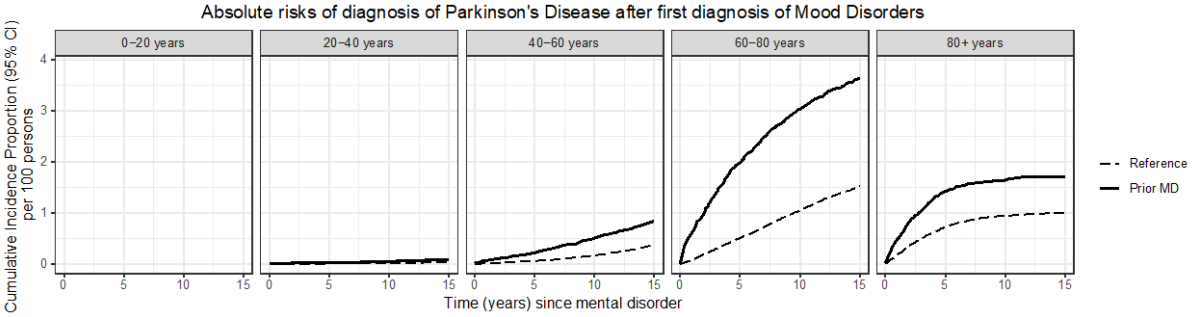


Figure S126.30 – Multiple Sclerosis

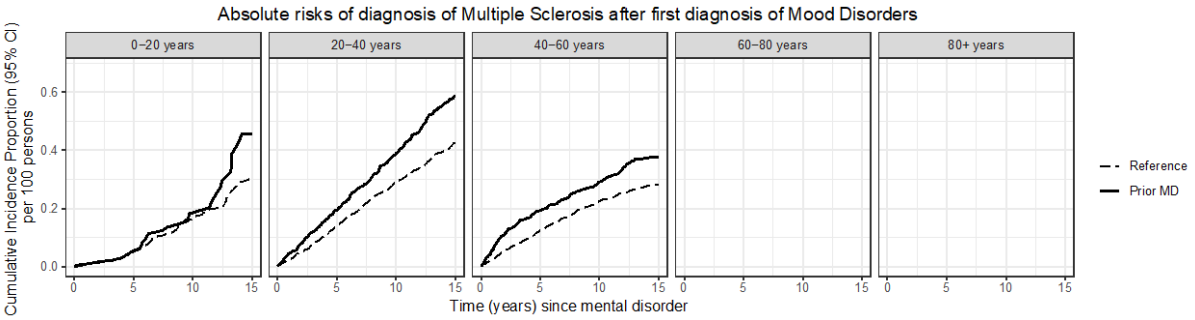
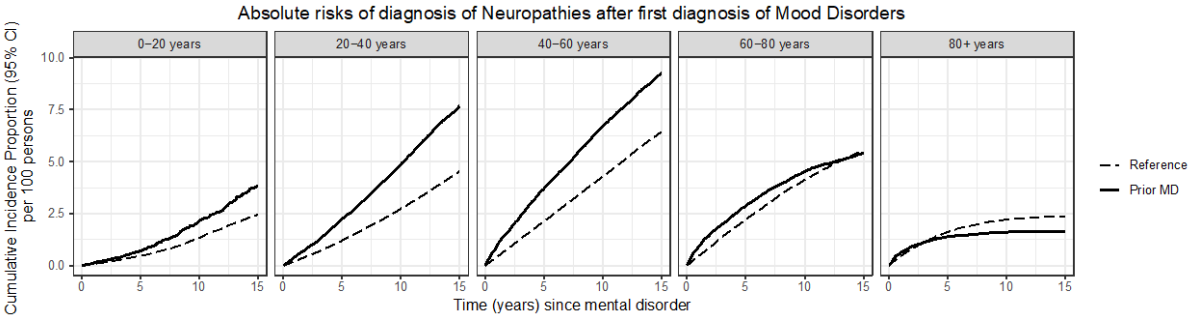


Figure S126.31 – Neuropathies



Figures S127.1-S127.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Neurotic Disorders

Figure S127.1 – Hypertension

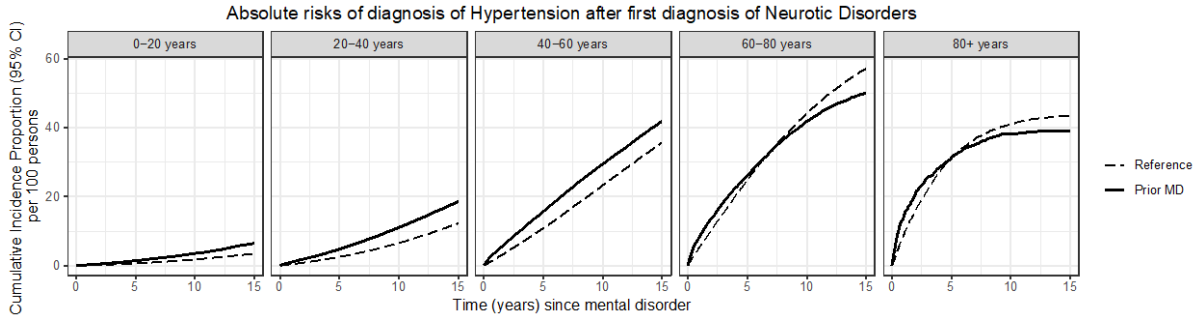


Figure S127.2 – Dyslipidemia

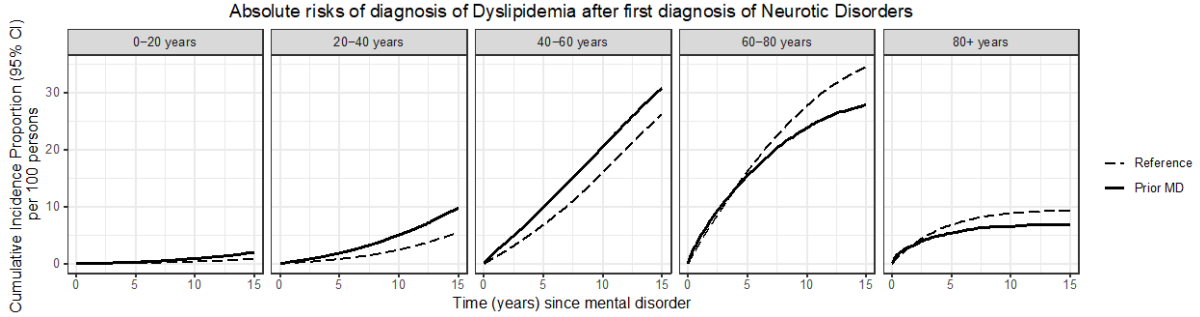


Figure S127.3 – Ischemic Heart Disease

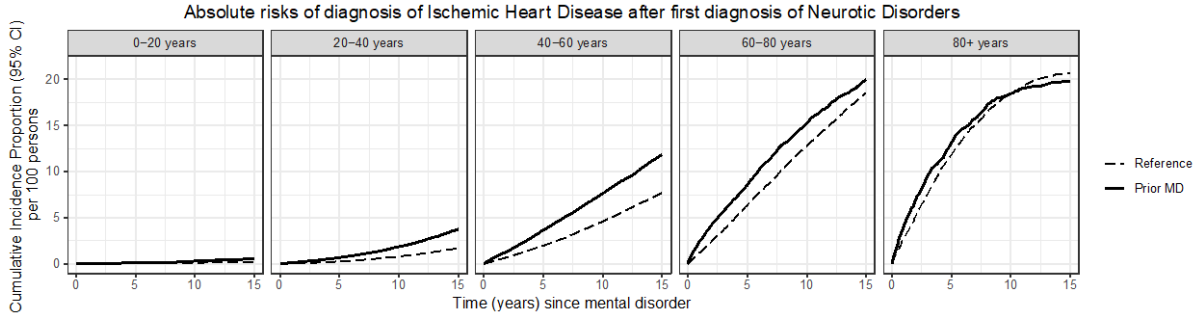


Figure S127.4 – Atrial Fibrillation

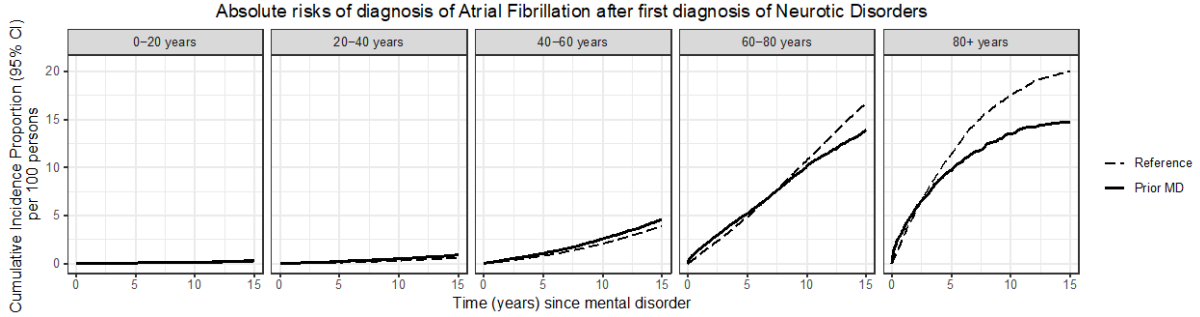


Figure S127.5 – Heart Failure

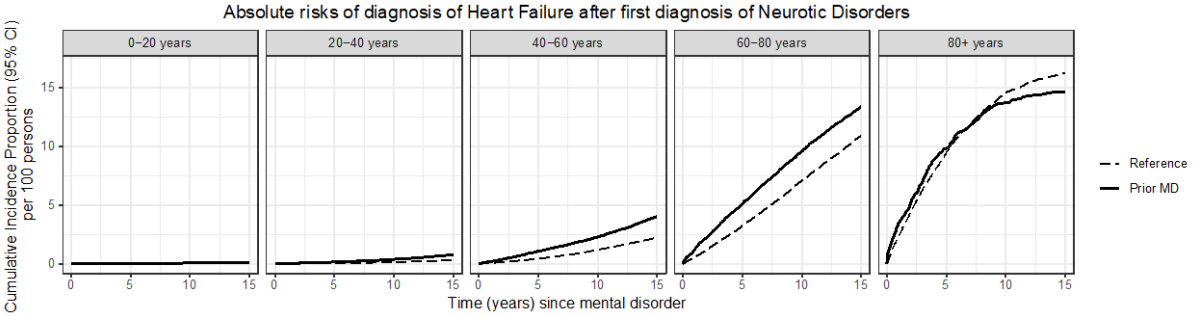


Figure S127.6 – Peripheral Artery Occlusive Disease

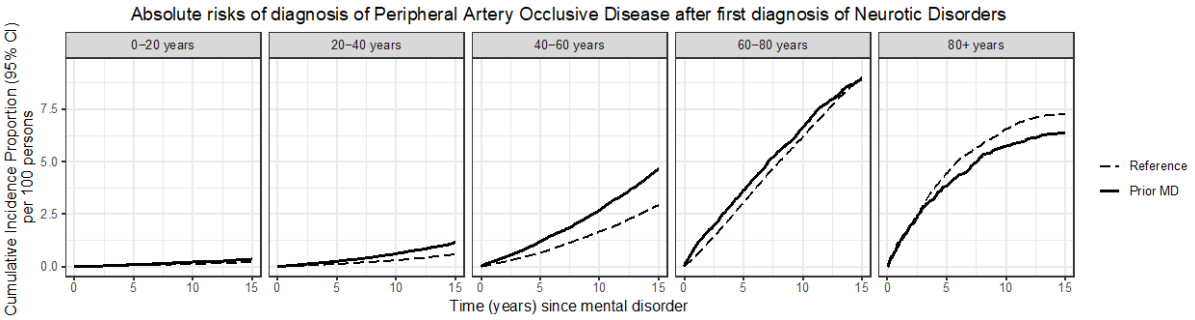


Figure S127.7 – Stroke

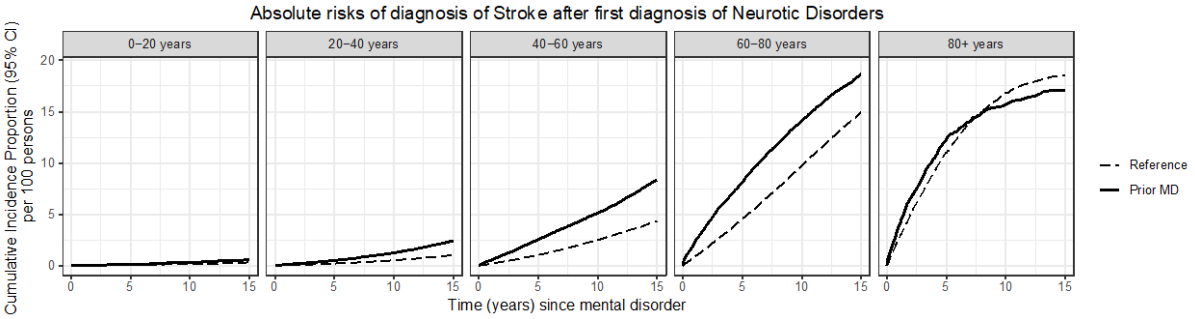


Figure S127.8 – Diabetes Mellitus

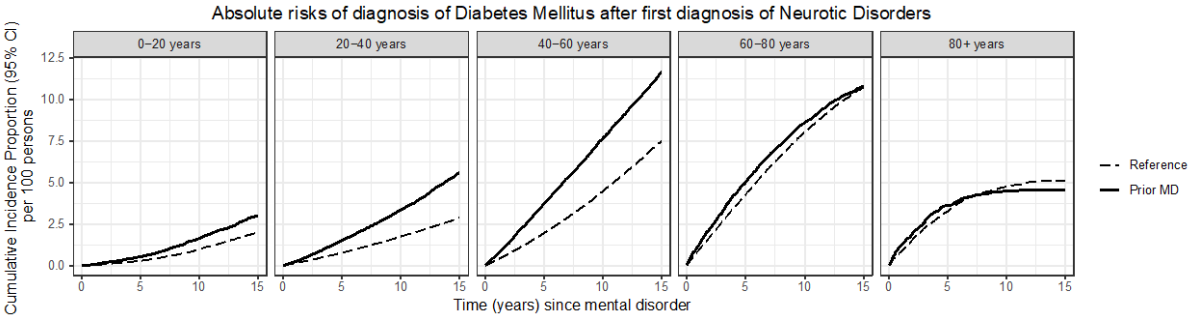


Figure S127.9 – Thyroid Disorders

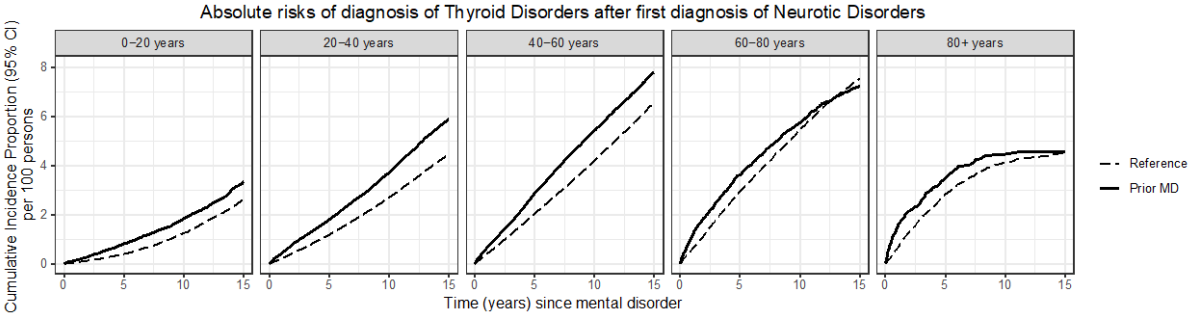


Figure S127.10 – Gout

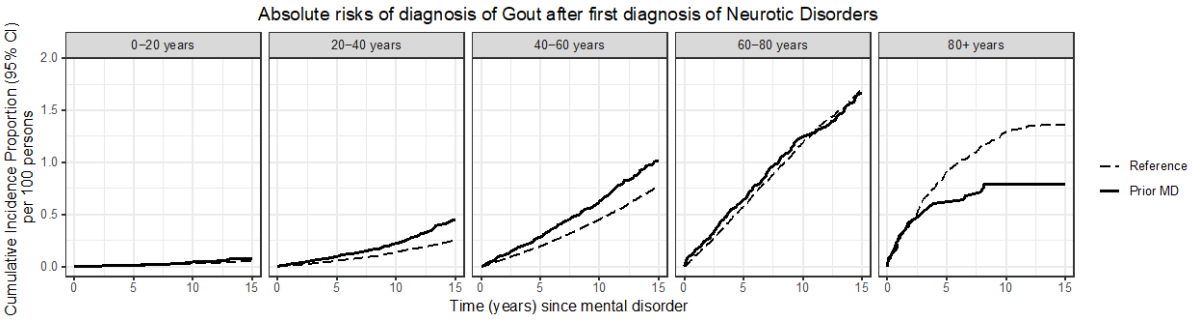


Figure S127.11 – Chronic Pulmonary Disease

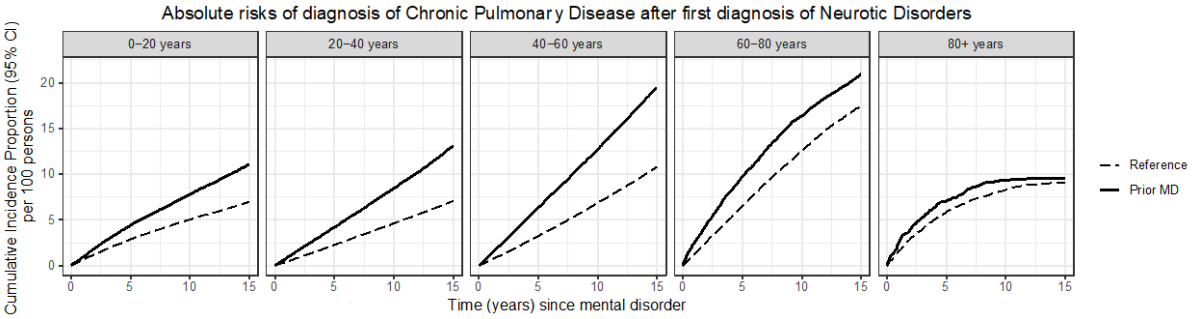


Figure S127.12 – Allergy

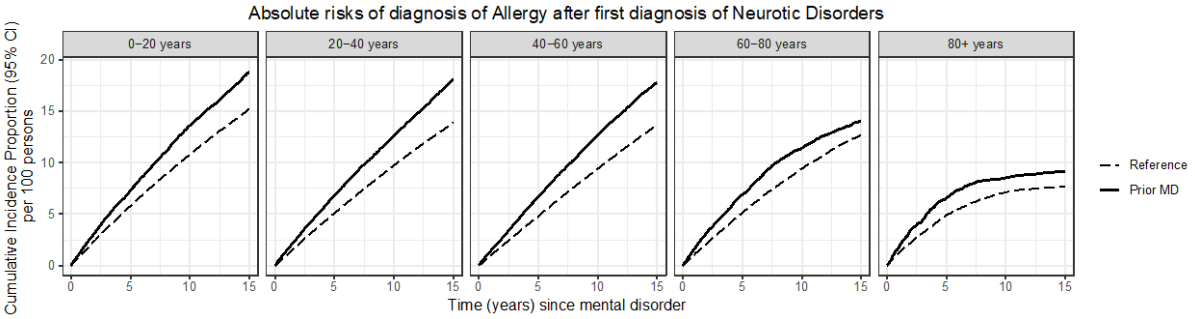


Figure S127.13 – Ulcer/Chronic Gastritis

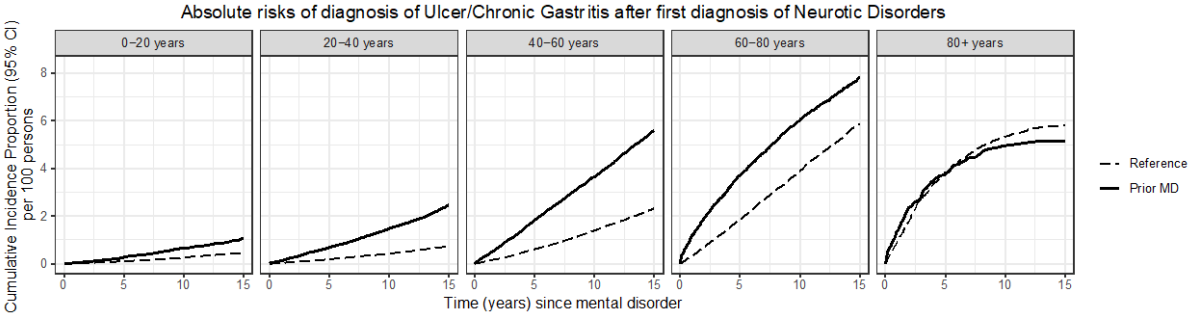


Figure S127.14 – Chronic Liver Disease

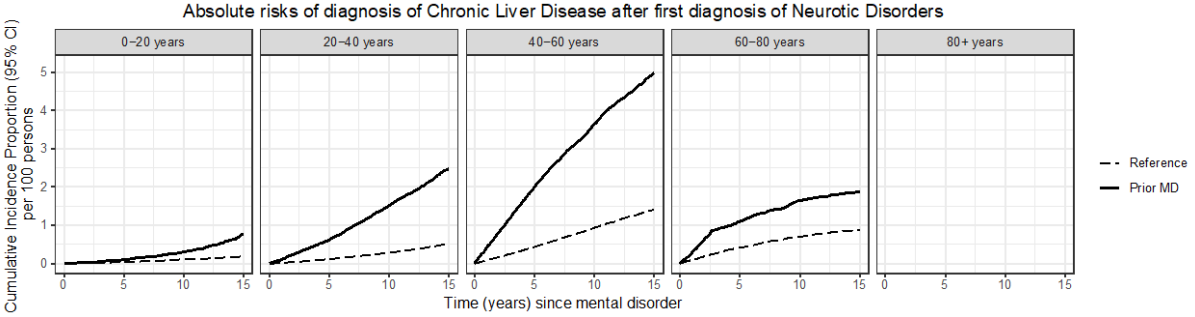


Figure S127.15 – Inflammatory Bowel Disease

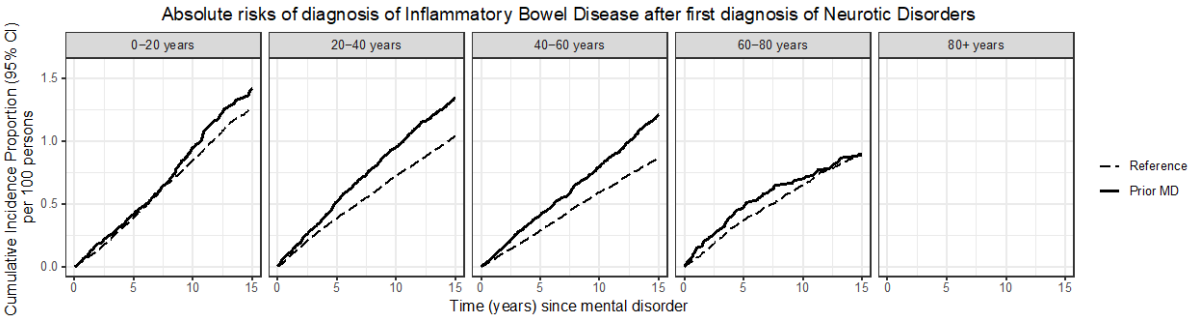


Figure S127.16 – Diverticular Disease of the Intestine

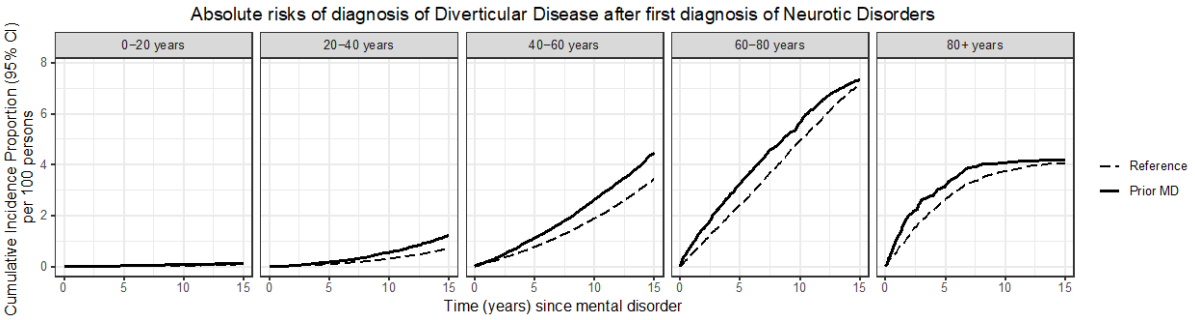


Figure S127.17 – Chronic Kidney Disease

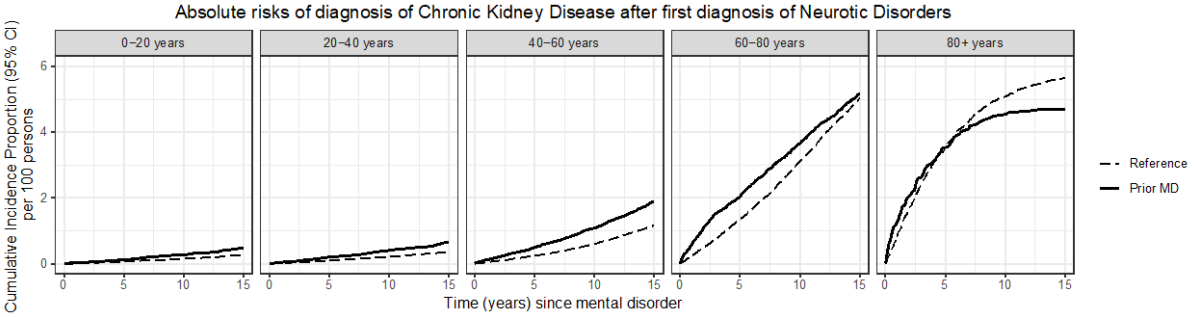


Figure S127.18 – Prostate Disorders

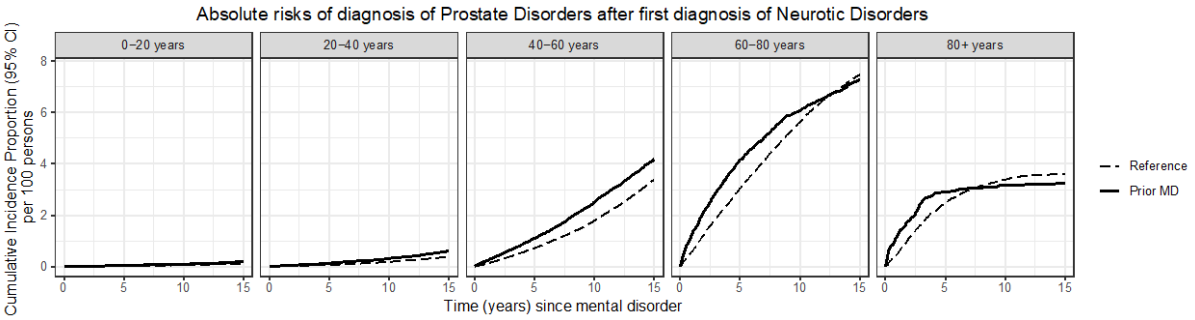


Figure S127.19 – Connective Tissue Disorders

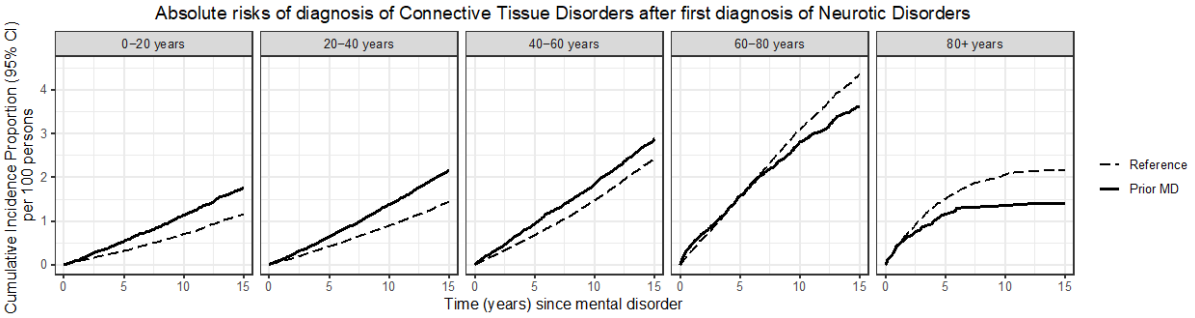


Figure S127.20 – Osteoporosis

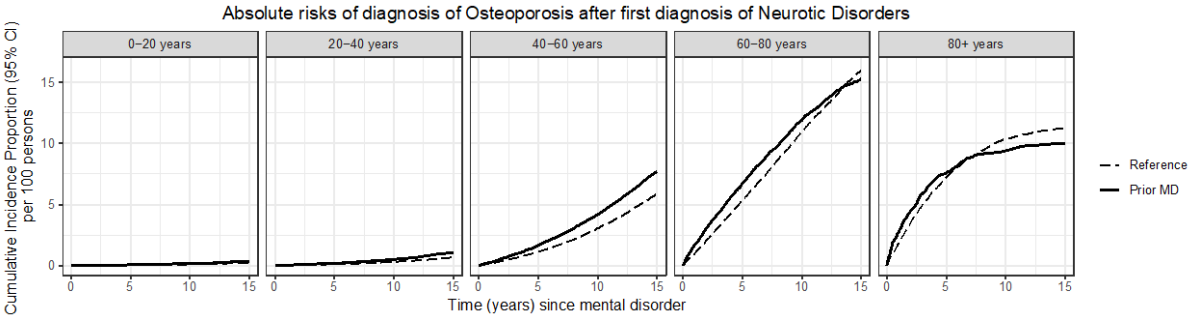


Figure S127.21 – Painful Conditions

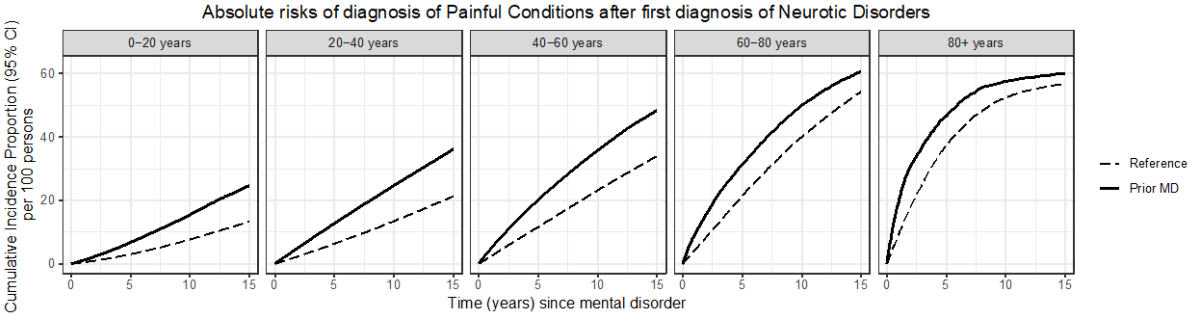


Figure S127.22 – HIV/AIDS

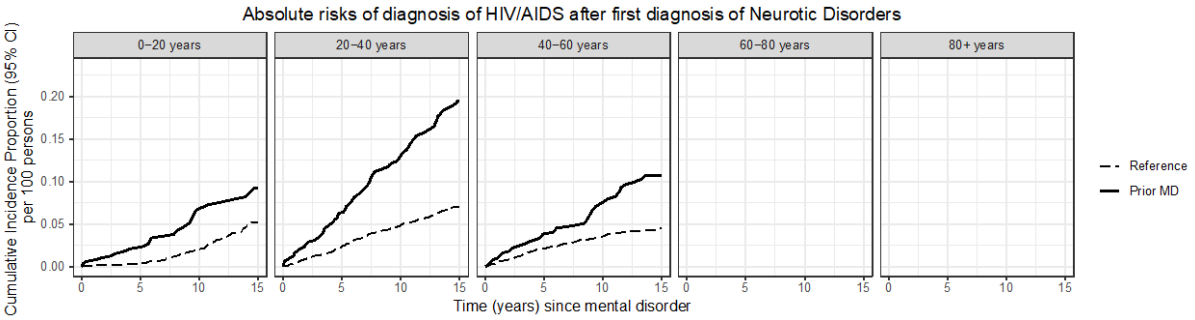


Figure S127.23 – Anemias

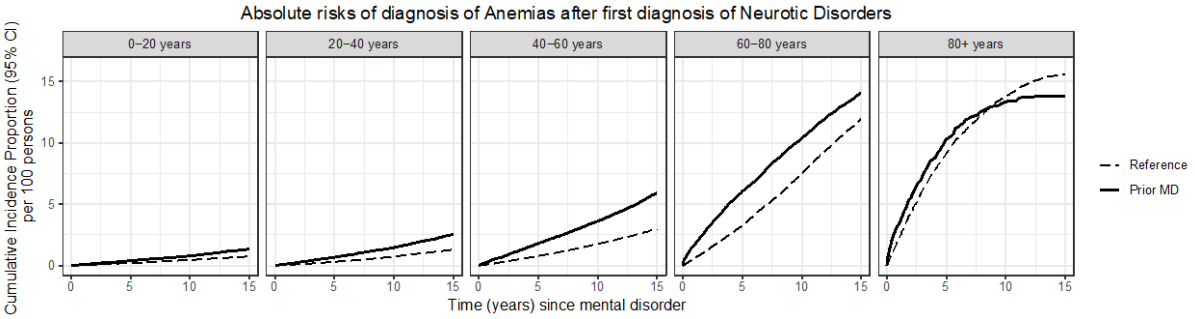


Figure S127.24 – Cancer

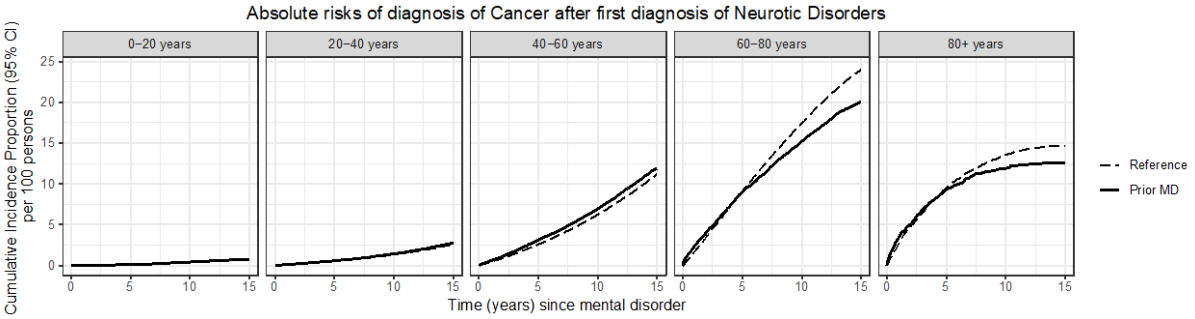


Figure S127.25 – Vision Problems

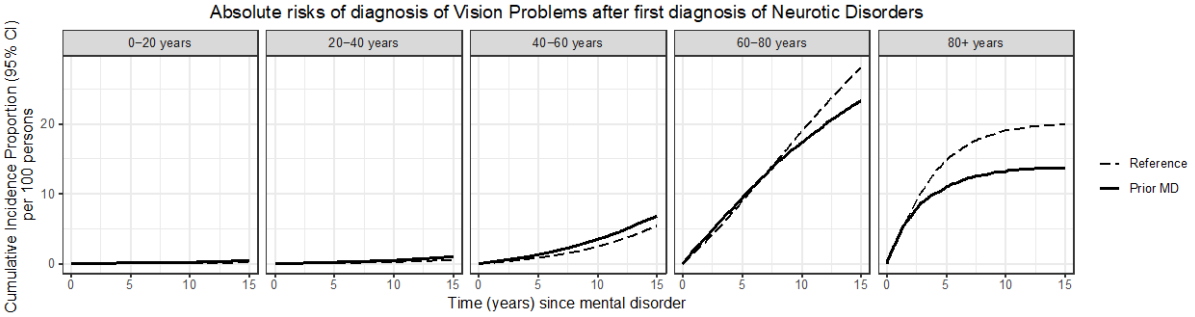


Figure S127.26 – Hearing Problems

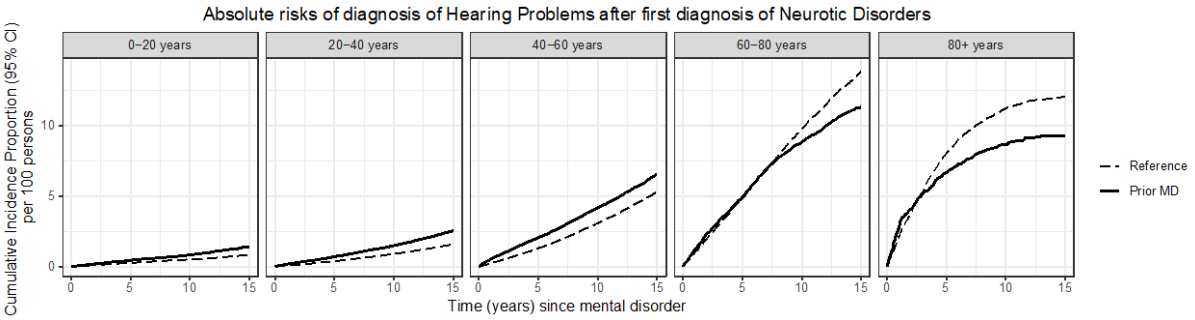


Figure S127.27 – Migraine

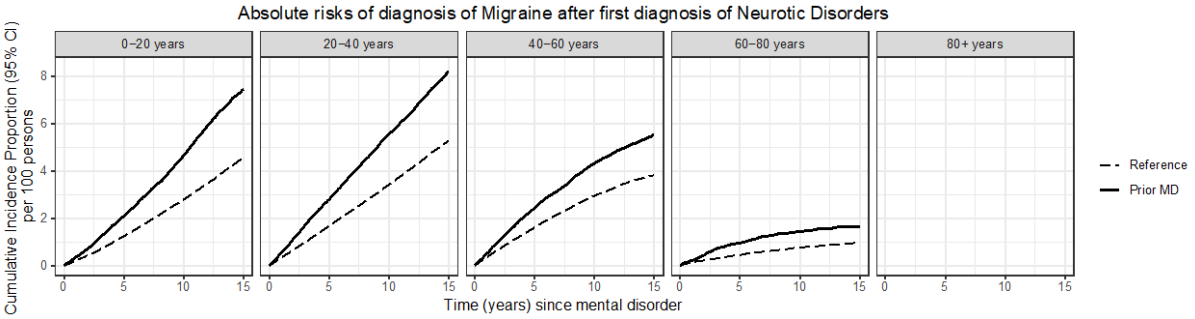


Figure S127.28 – Epilepsy

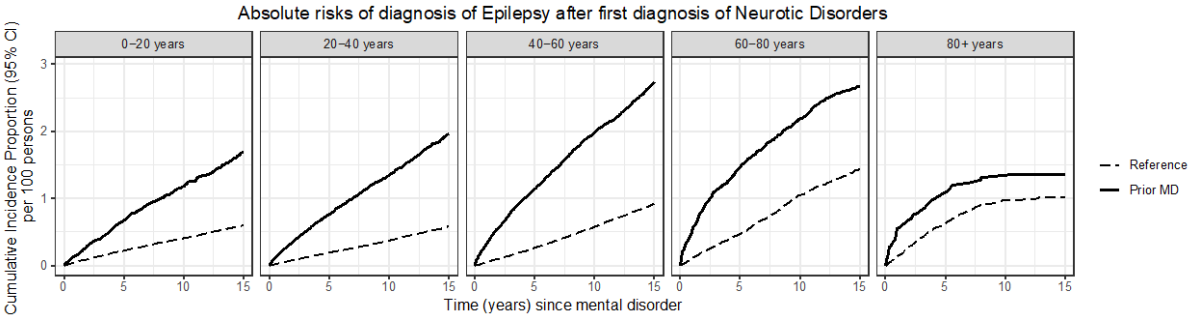


Figure S127.29 – Parkinson's Disease

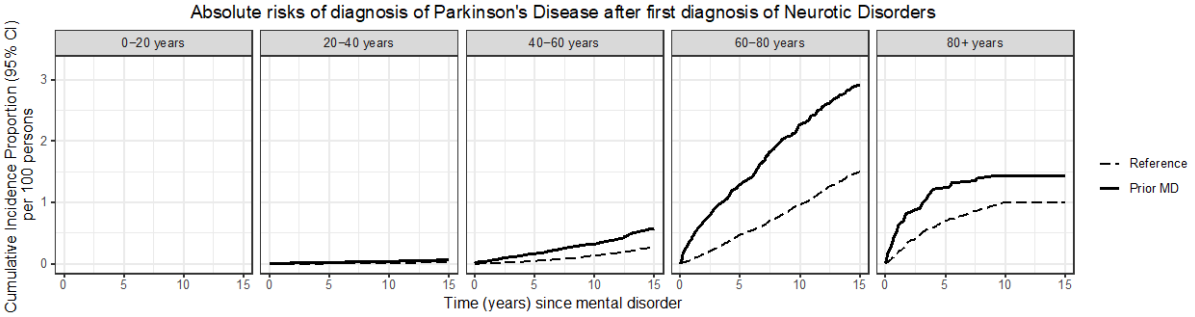


Figure S127.30 – Multiple Sclerosis

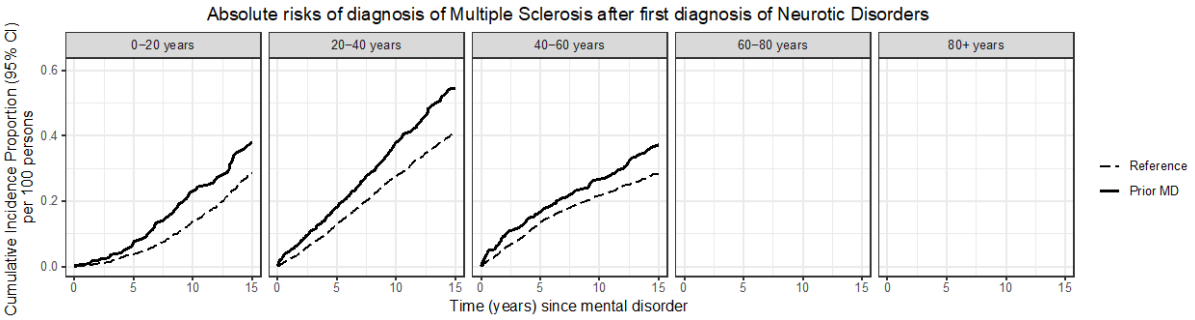
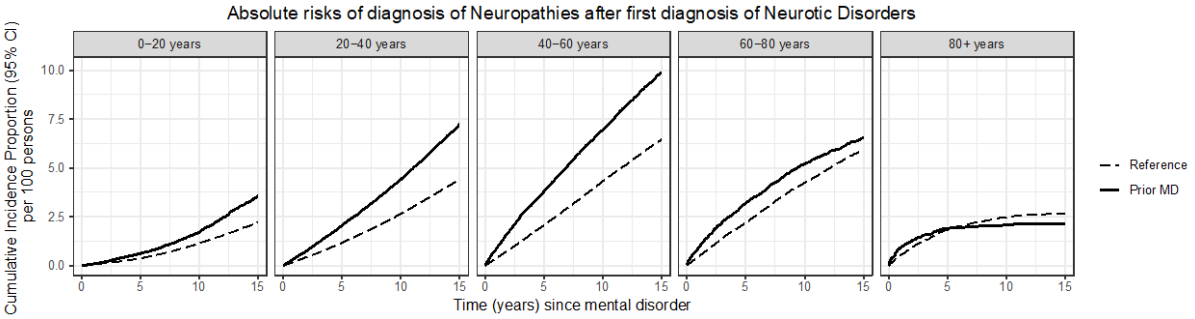


Figure S127.31 – Neuropathies



Figures S128.1-S128.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Eating Disorders

Figure S128.1 – Hypertension

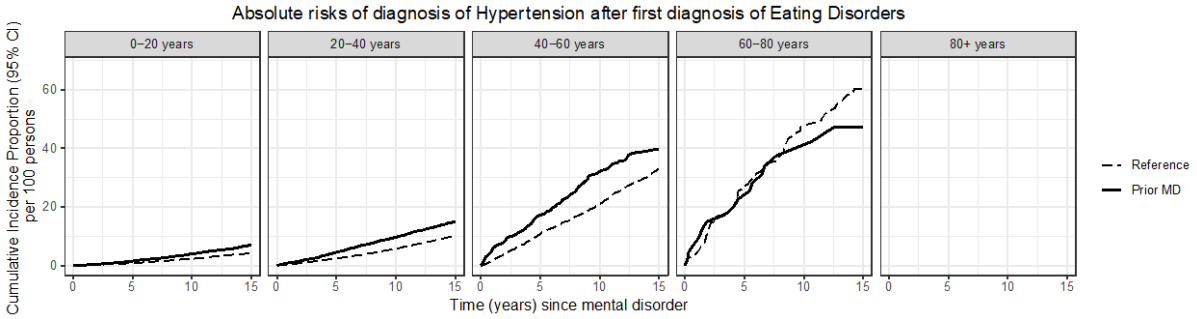


Figure S128.2 – Dyslipidemia

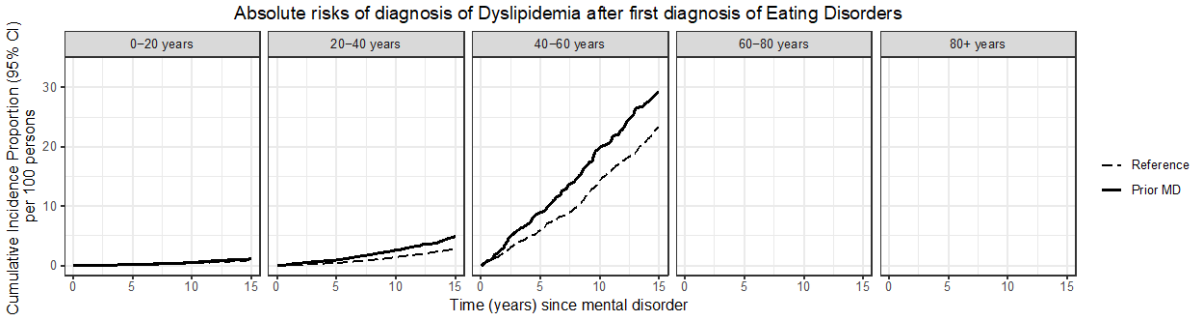


Figure S128.3 – Ischemic Heart Disease

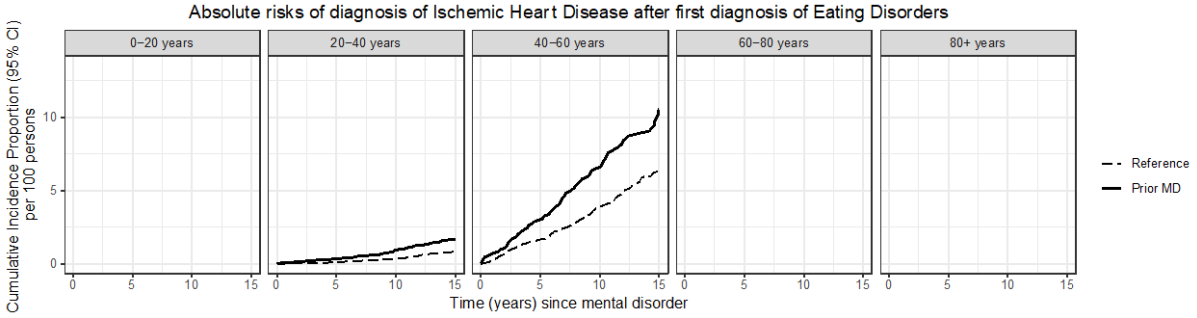


Figure S128.4 – Atrial Fibrillation

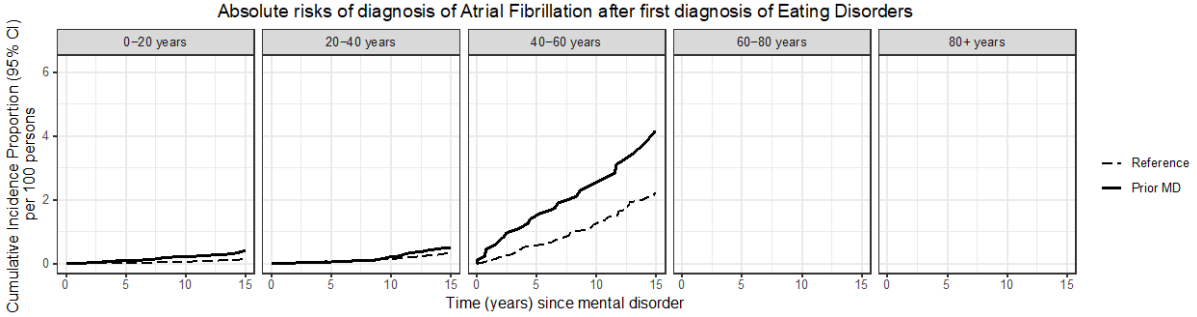


Figure S128.5 – Heart Failure

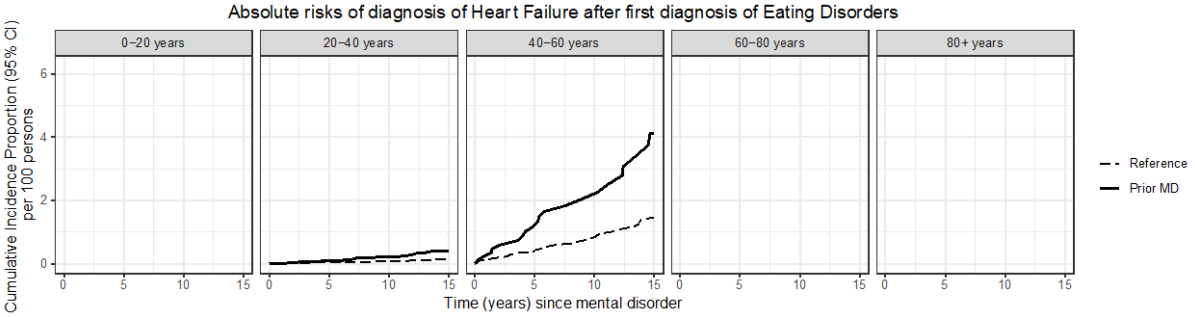


Figure S128.6 – Peripheral Artery Occlusive Disease

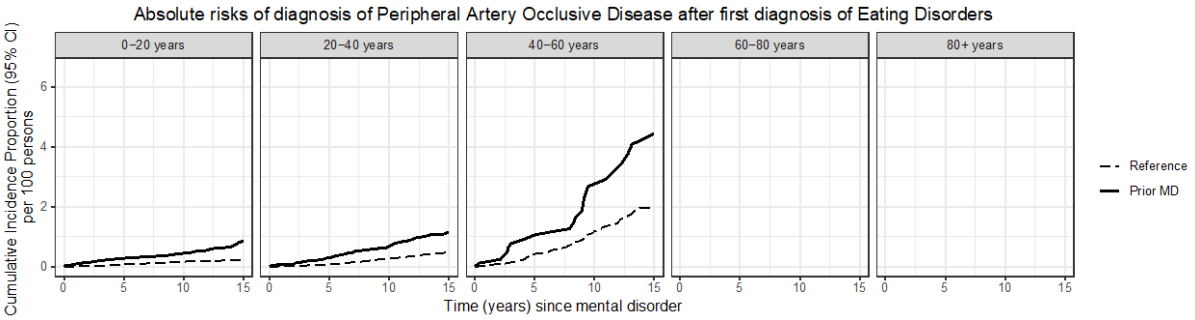


Figure S128.7 – Stroke

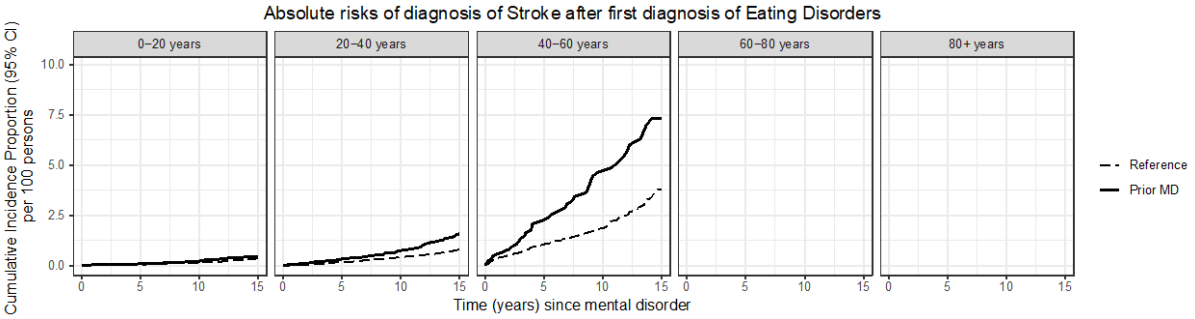


Figure S128.8 – Diabetes Mellitus

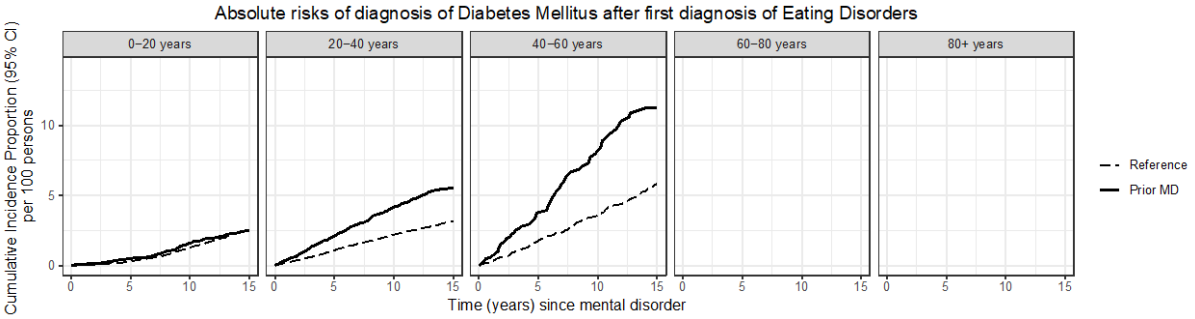


Figure S128.9 – Thyroid Disorders

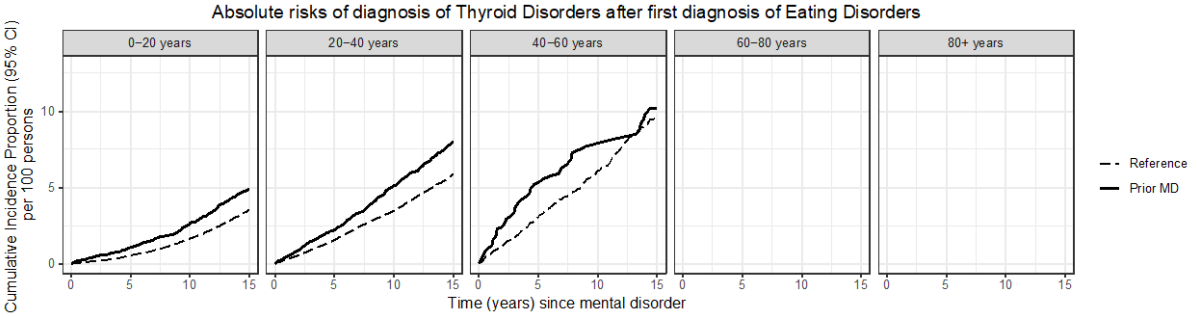


Figure S128.10 – Gout

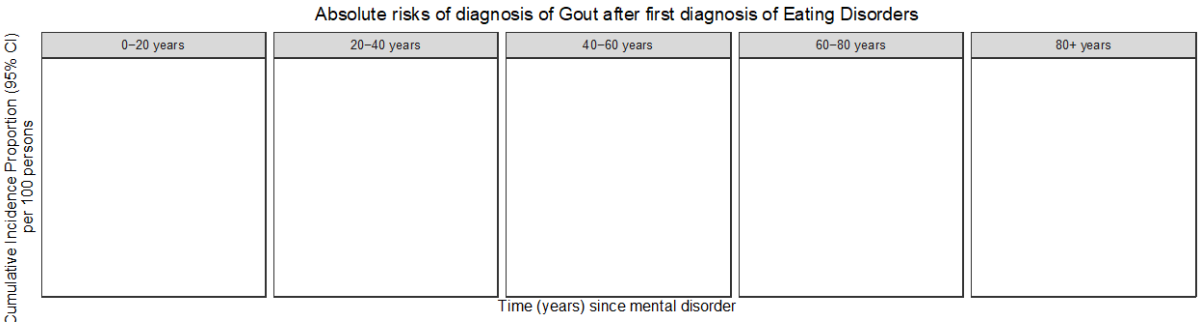


Figure S128.11 – Chronic Pulmonary Disease

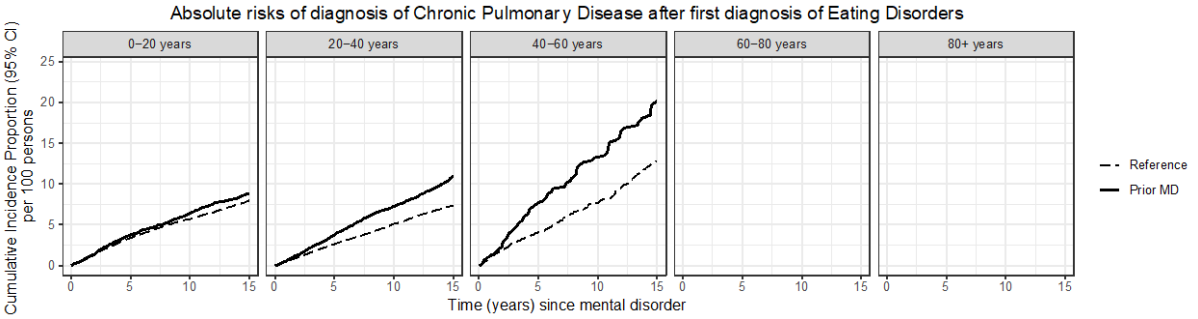


Figure S128.12 – Allergy

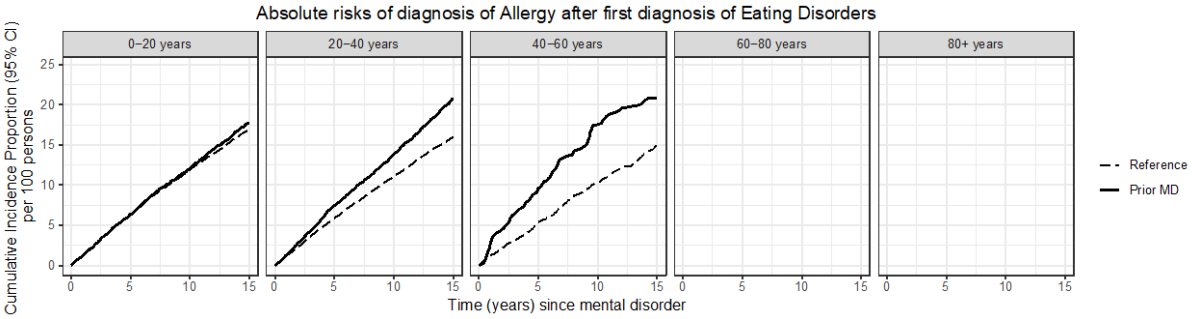


Figure S128.13 – Ulcer/Chronic Gastritis

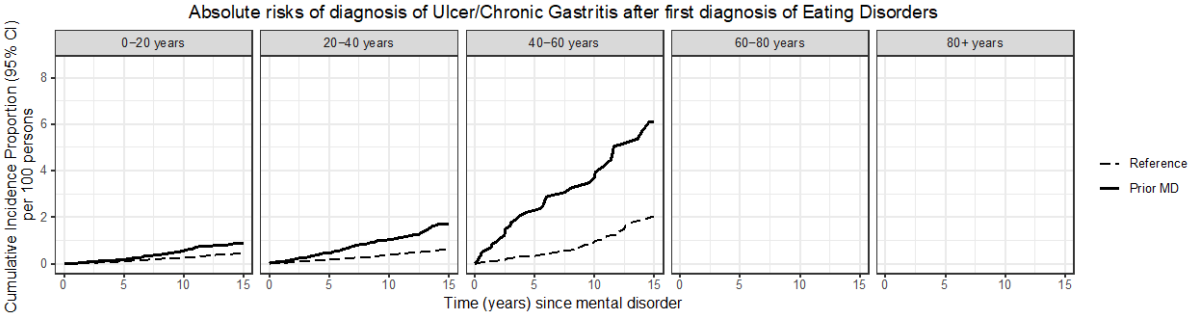


Figure S128.14 – Chronic Liver Disease

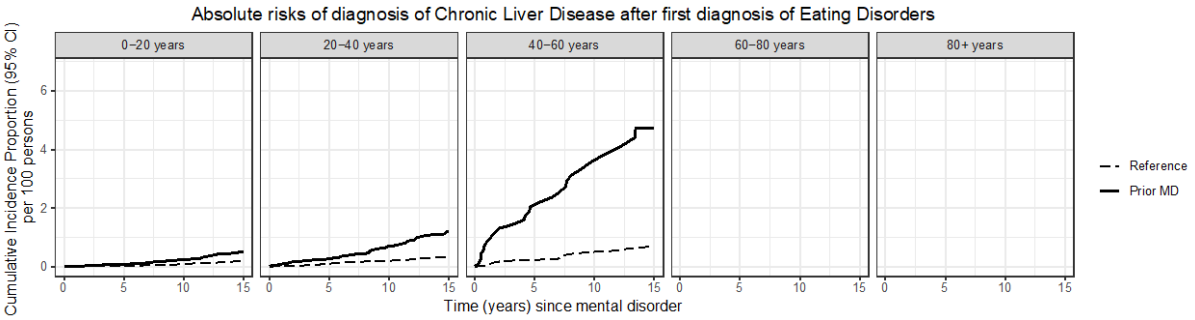


Figure S128.15 – Inflammatory Bowel Disease

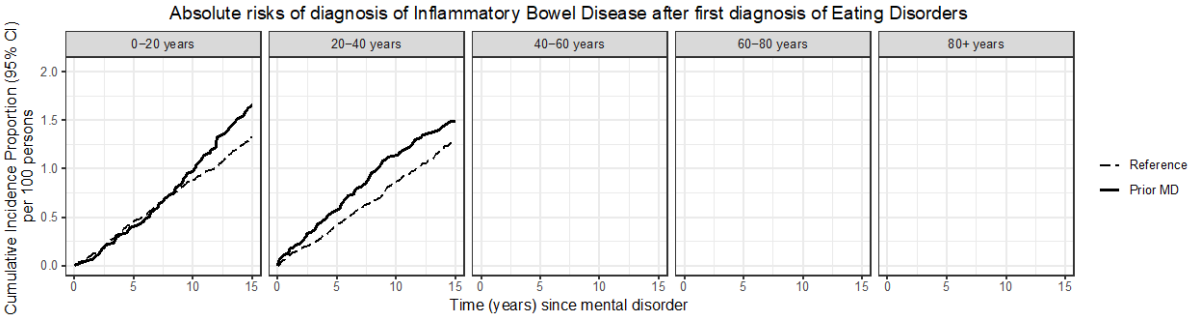


Figure S128.16 – Diverticular Disease of the Intestine

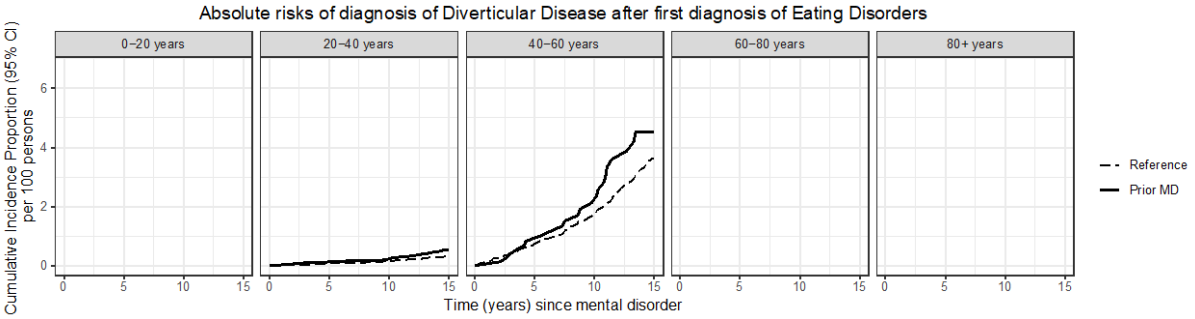


Figure S128.17 – Chronic Kidney Disease

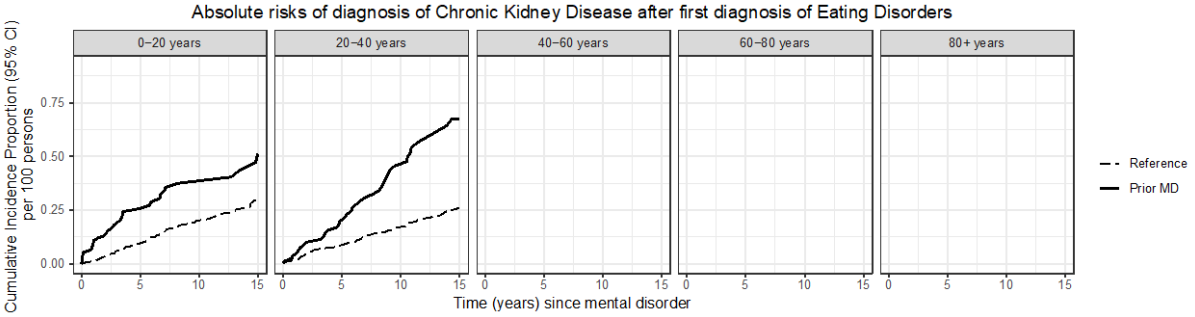


Figure S128.18 – Prostate Disorders

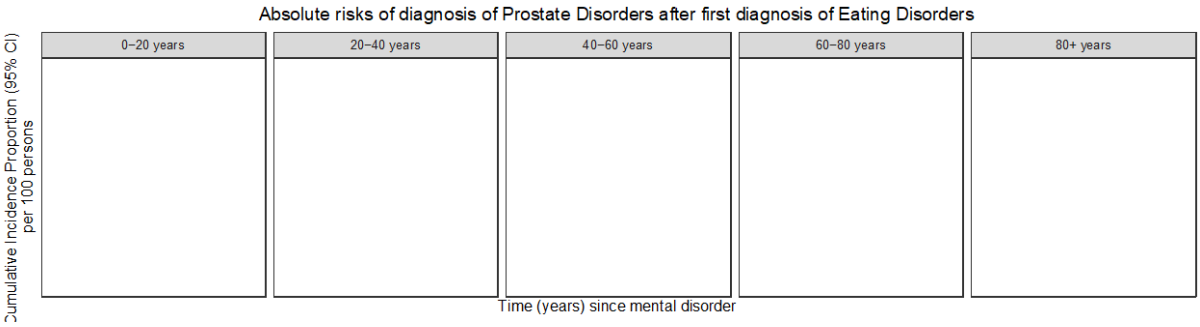


Figure S128.19 – Connective Tissue Disorders

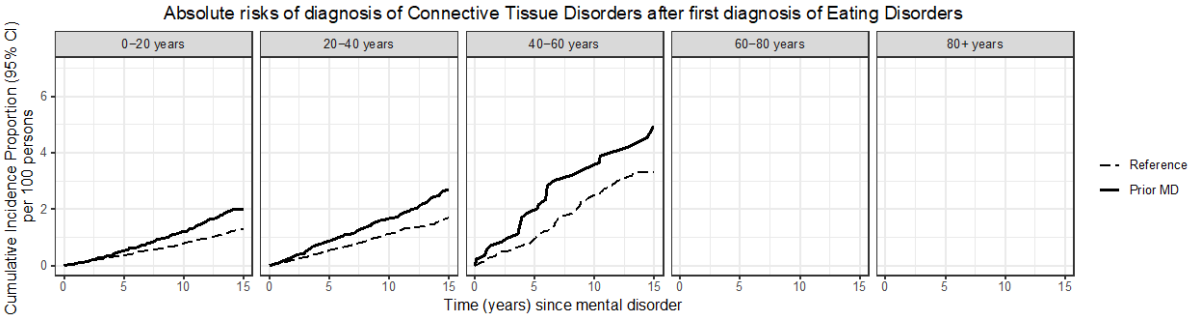


Figure S128.20 – Osteoporosis

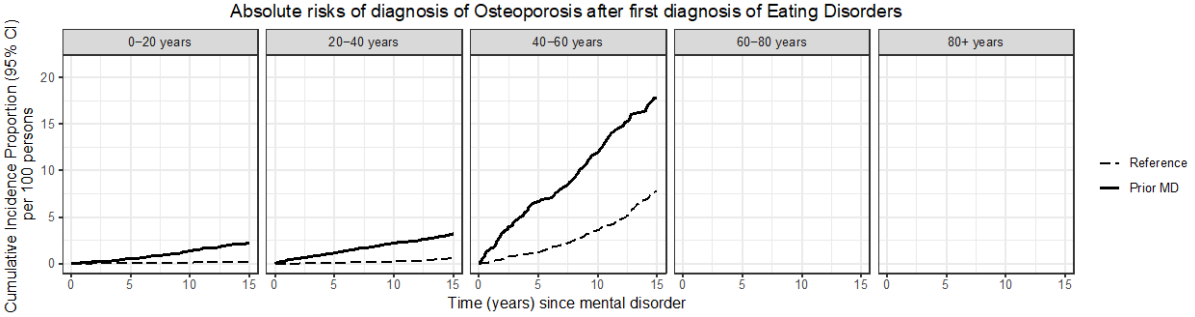


Figure S128.21 – Painful Conditions

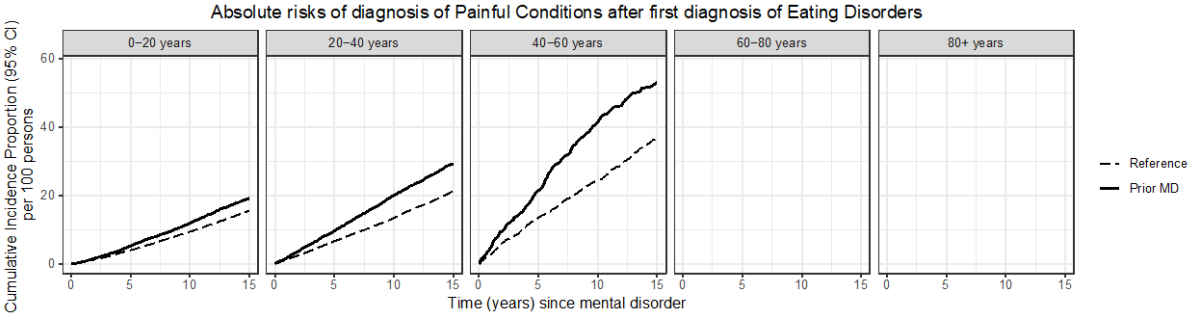


Figure S128.22 – HIV/AIDS

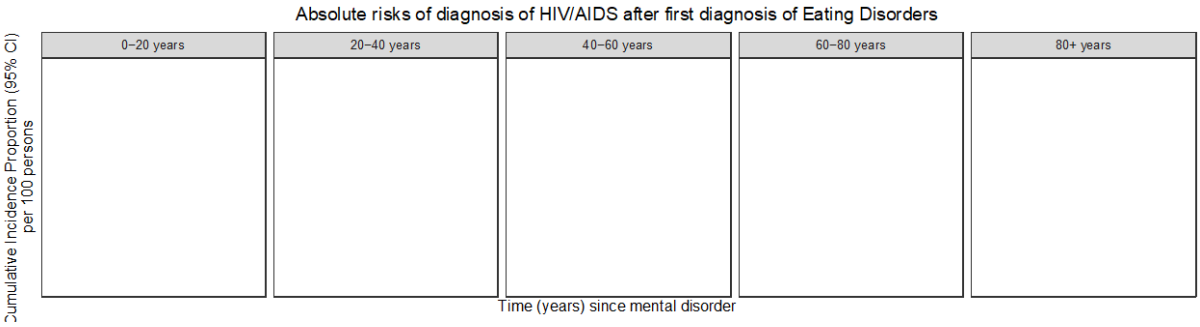


Figure S128.23 – Anemias

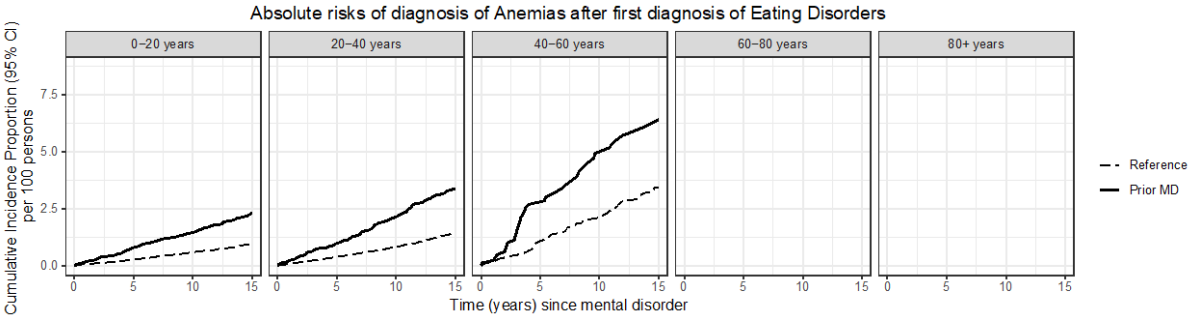


Figure S128.24 – Cancer

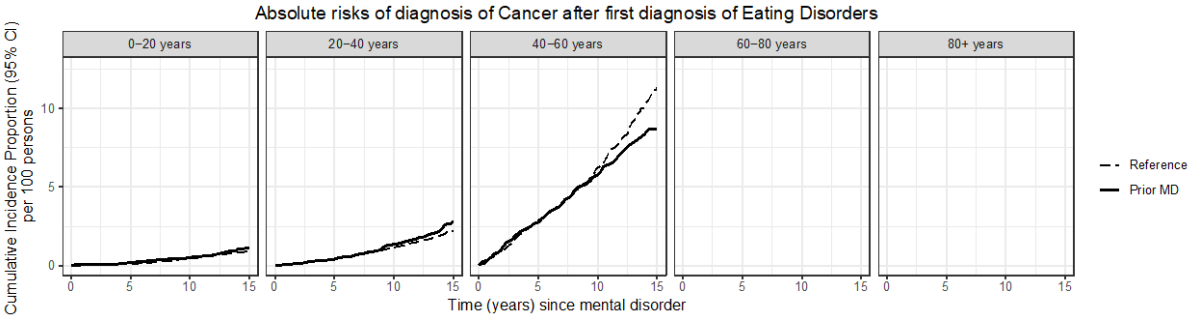


Figure S128.25 – Vision Problems

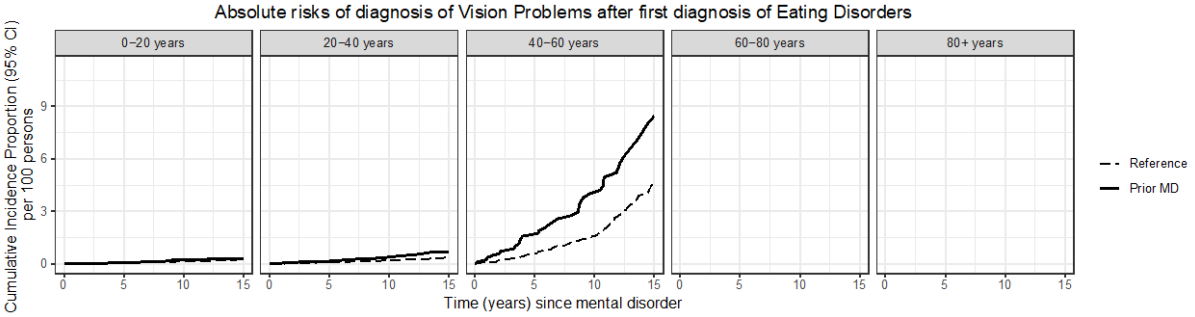


Figure S128.26 – Hearing Problems

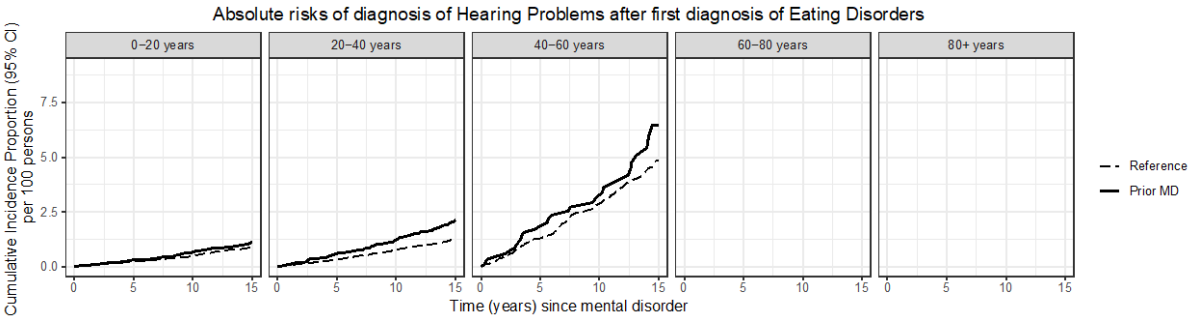


Figure S128.27 – Migraine

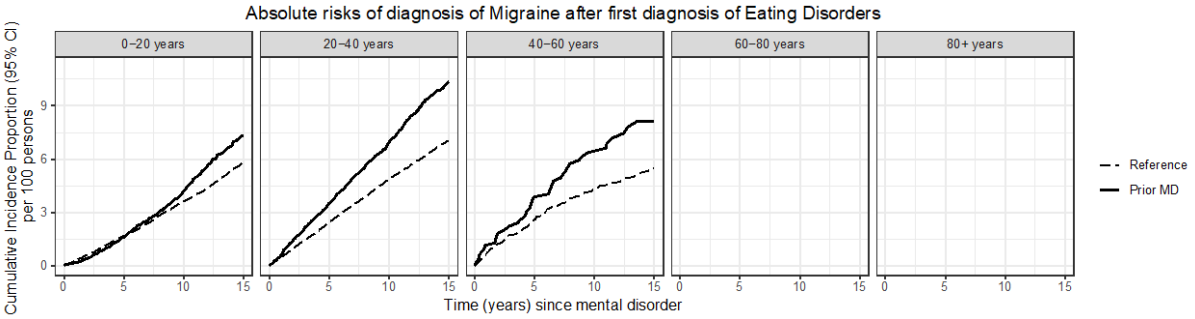


Figure S128.28 – Epilepsy

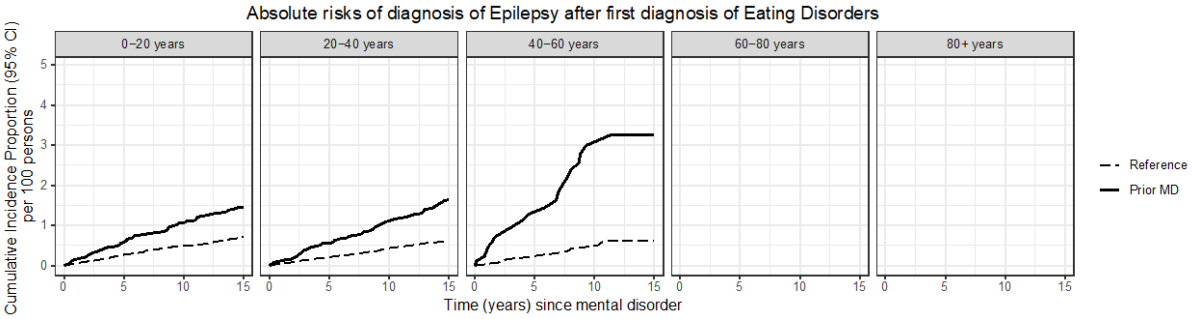


Figure S128.29 – Parkinson's Disease

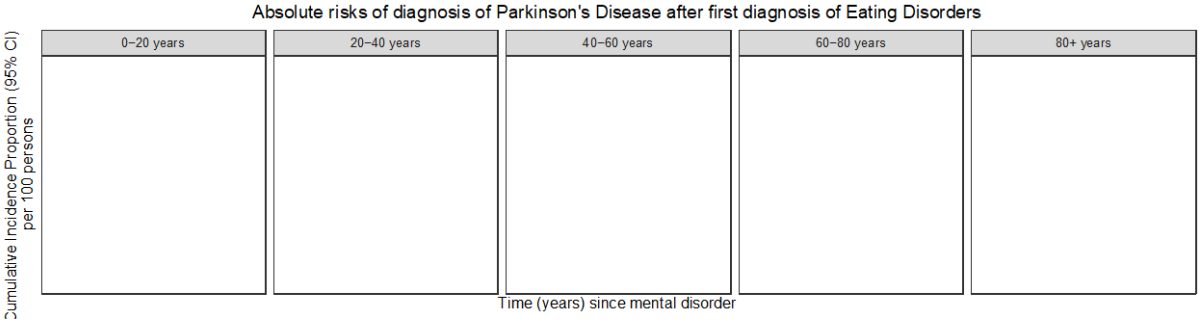


Figure S128.30 – Multiple Sclerosis

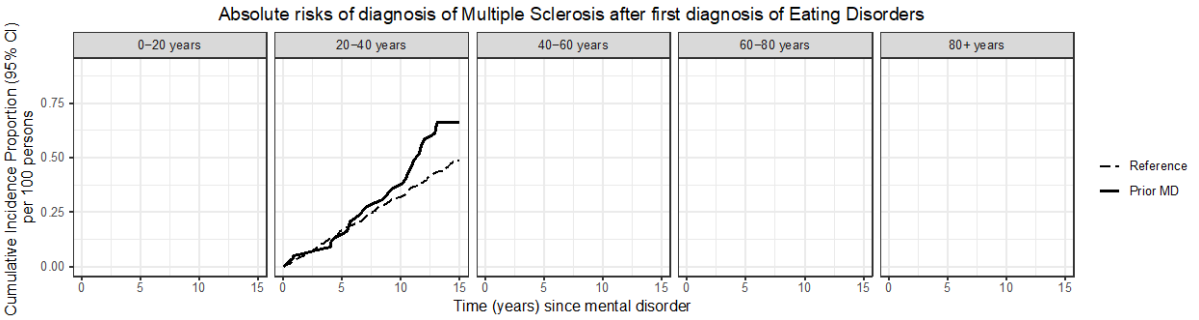
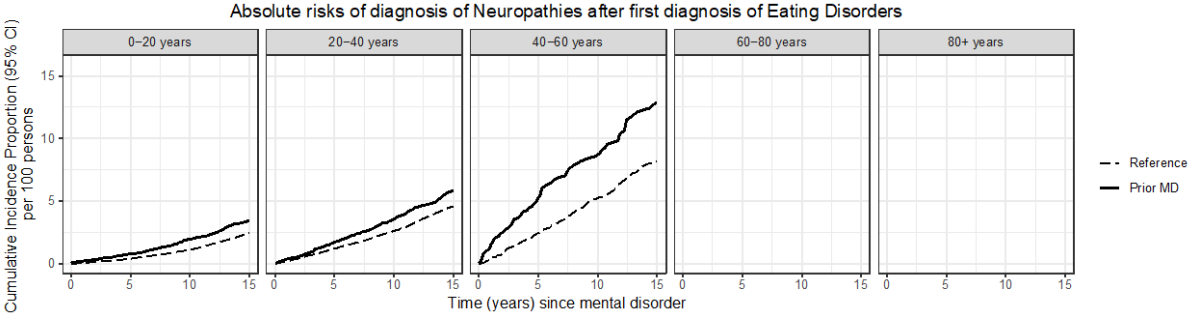


Figure S128.31 – Neuropathies



Figures S129.1-S129.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Personality Disorders.

Figure S129.1 – Hypertension

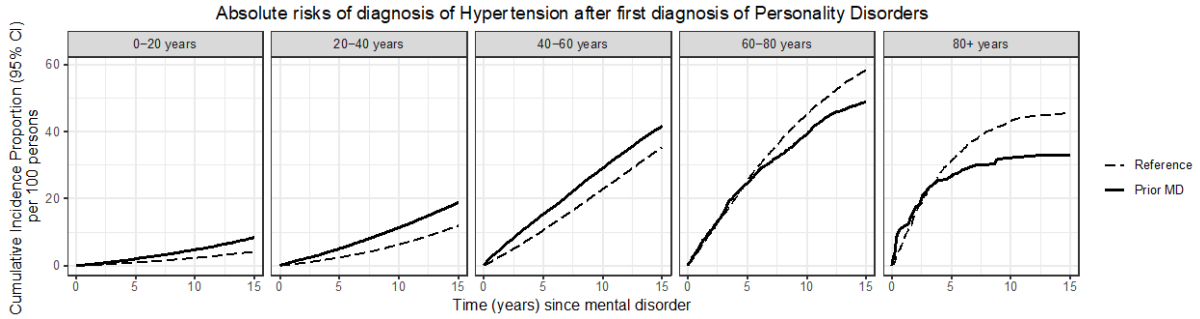


Figure S129.2 – Dyslipidemia

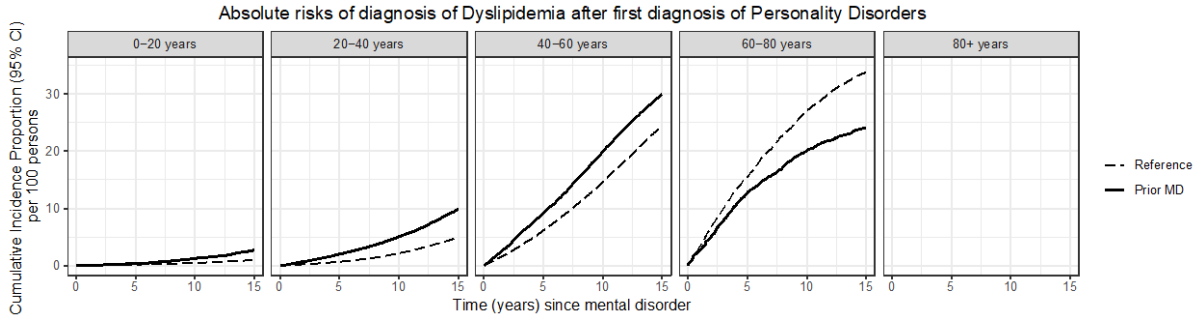


Figure S129.3 – Ischemic Heart Disease

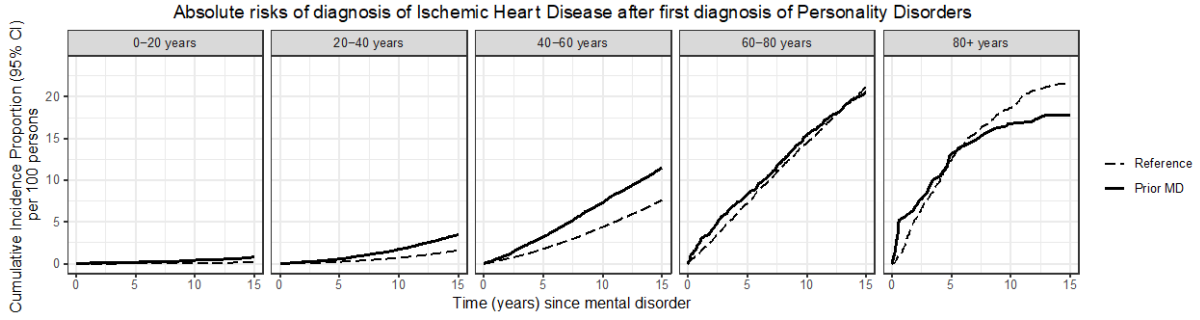


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Figure S129.4 – Atrial Fibrillation

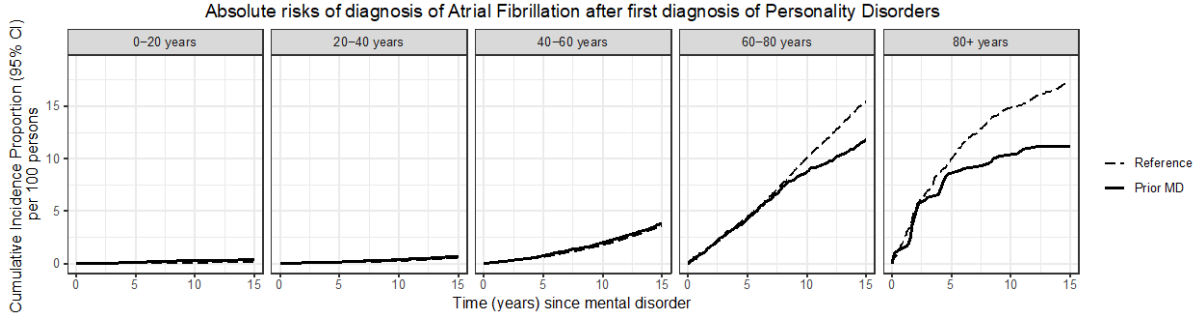


Figure S129.5 – Heart Failure

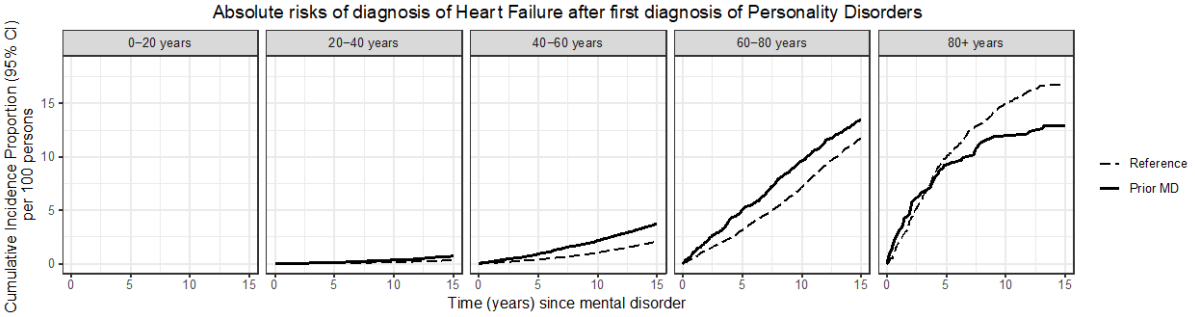


Figure S129.6 – Peripheral Artery Occlusive Disease

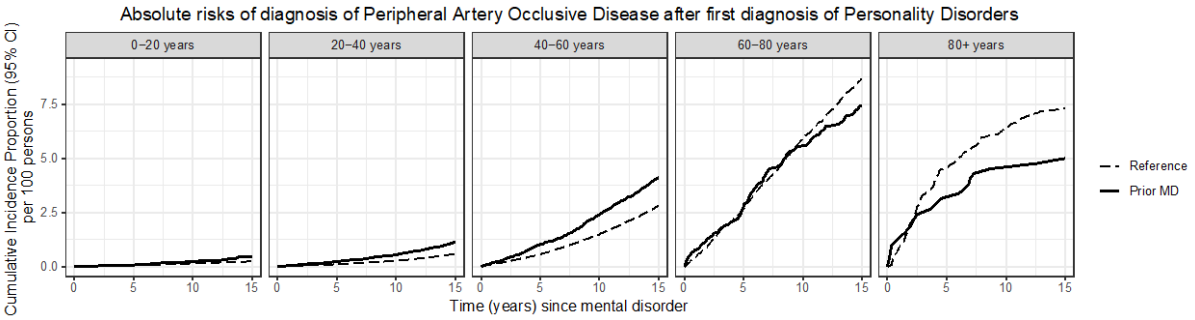


Figure S129.7 – Stroke

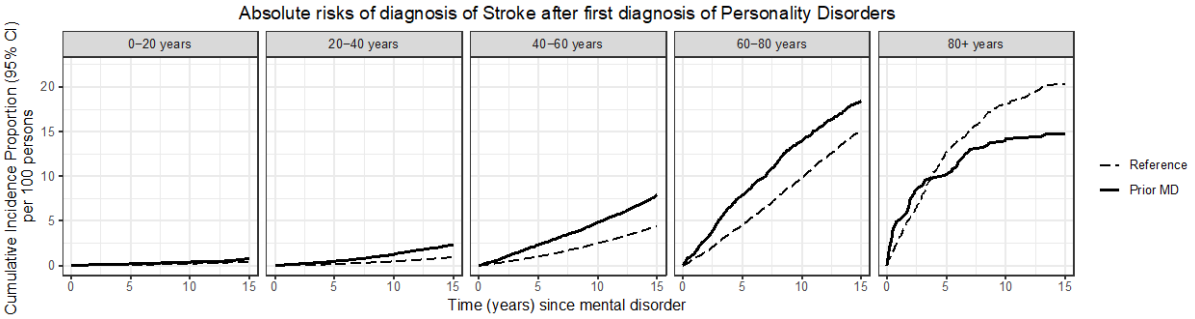


Figure S129.8 – Diabetes Mellitus

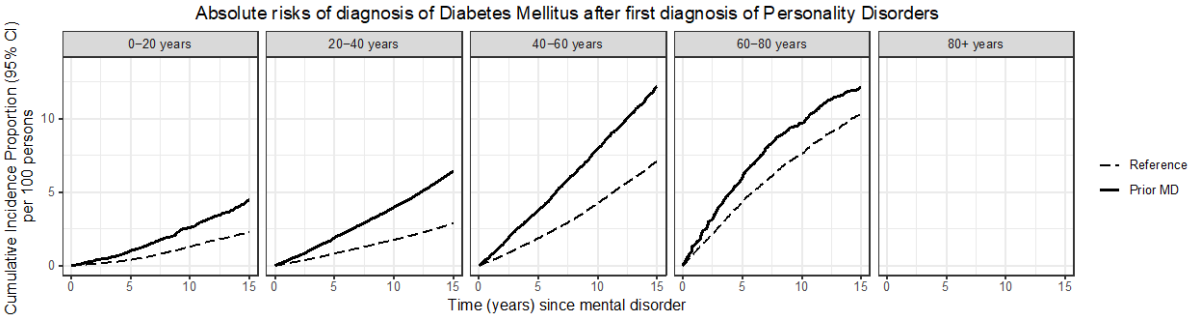


Figure S129.9 – Thyroid Disorders

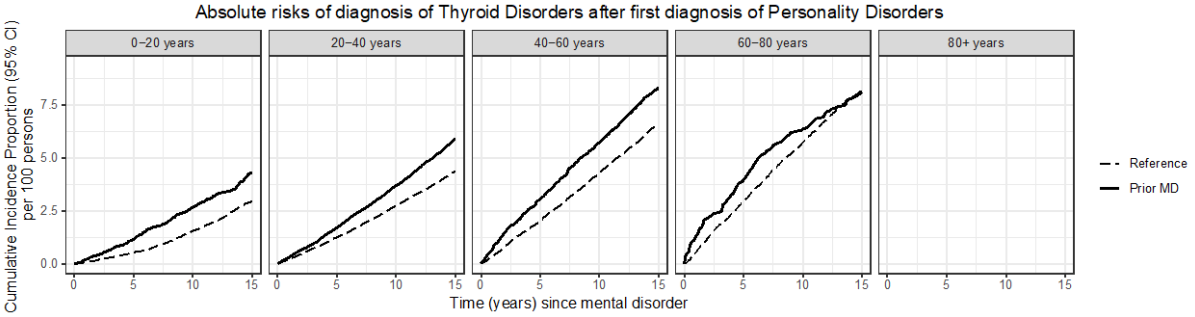


Figure S129.10 – Gout

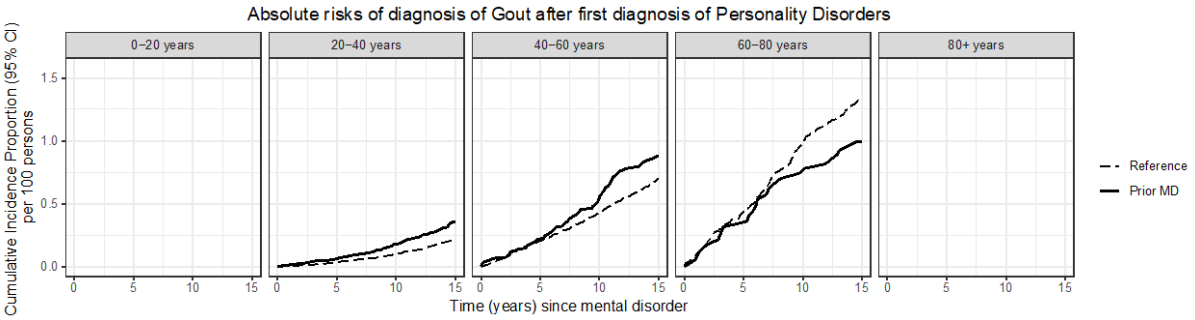


Figure S129.11 – Chronic Pulmonary Disease

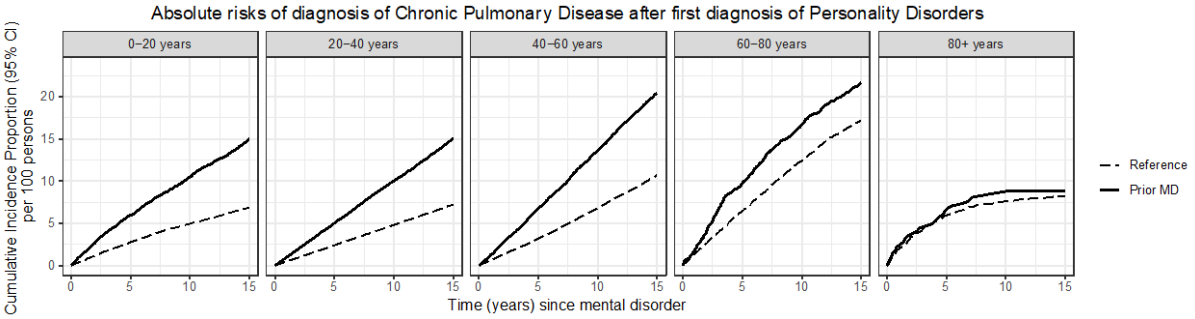


Figure S129.12 – Allergy

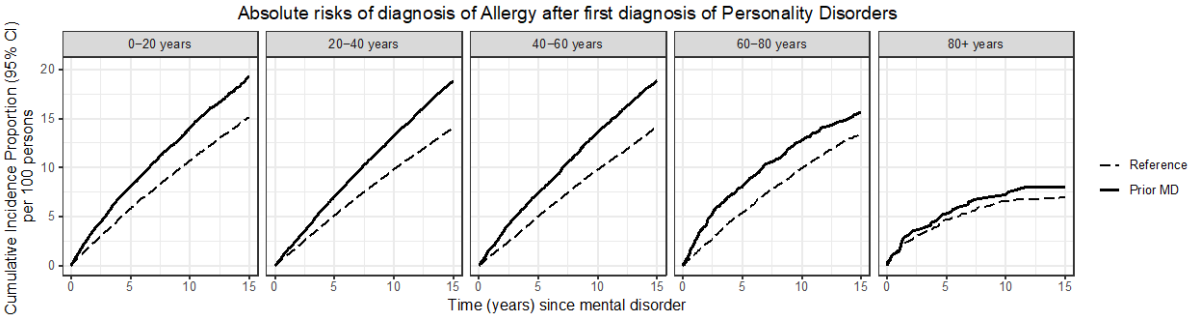


Figure S129.13 – Ulcer/Chronic Gastritis

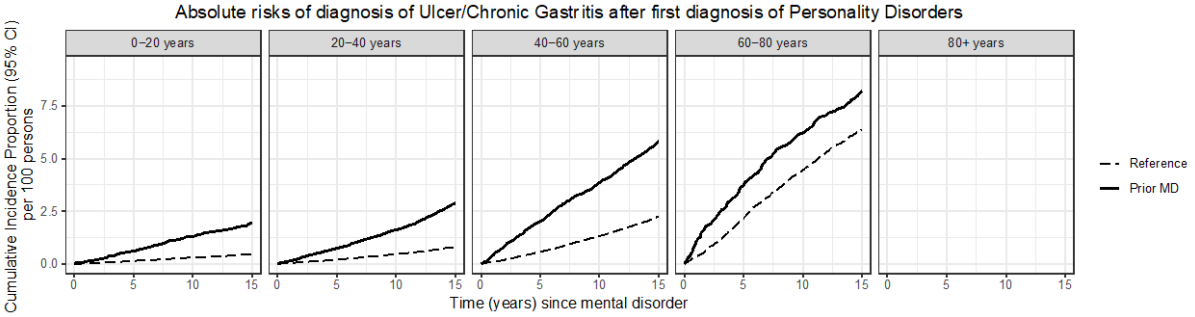


Figure S129.14 – Chronic Liver Disease

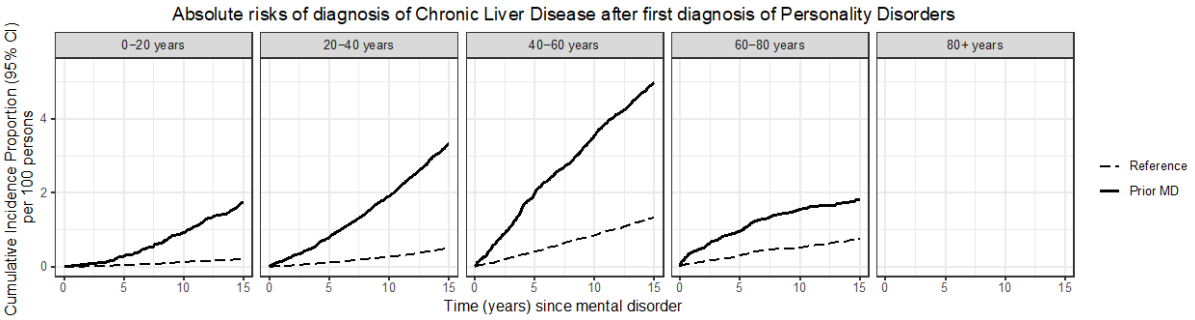


Figure S129.15 – Inflammatory Bowel Disease

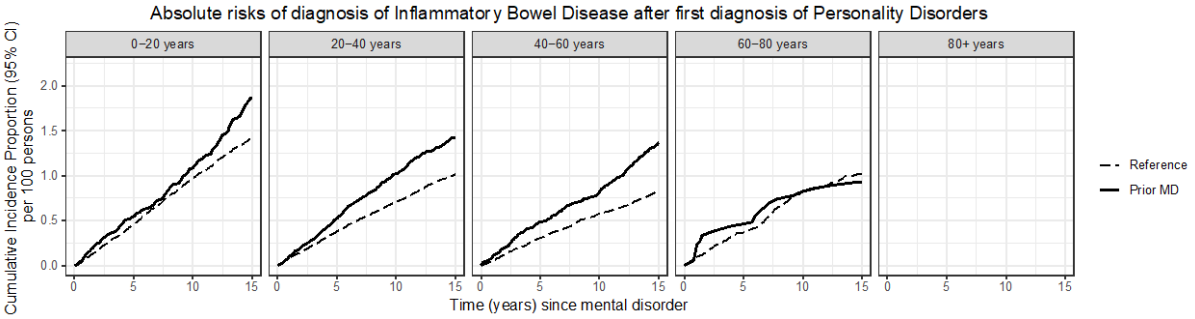


Figure S129.16 – Diverticular Disease of the Intestine

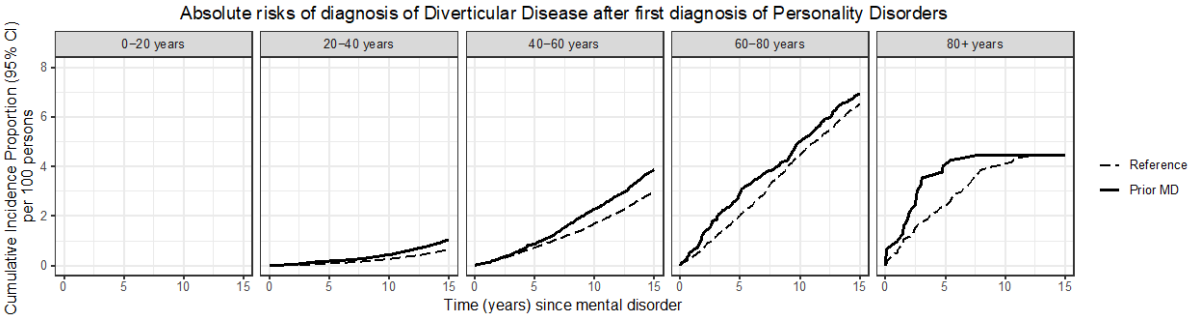


Figure S129.17 – Chronic Kidney Disease

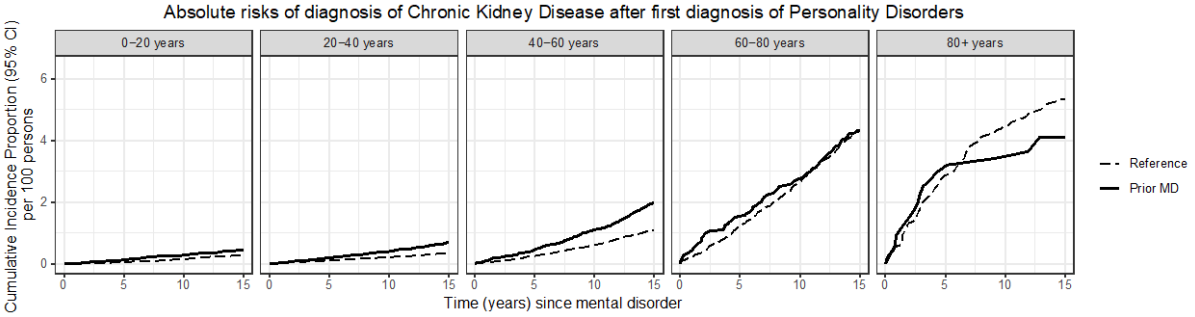


Figure S129.18 – Prostate Disorders

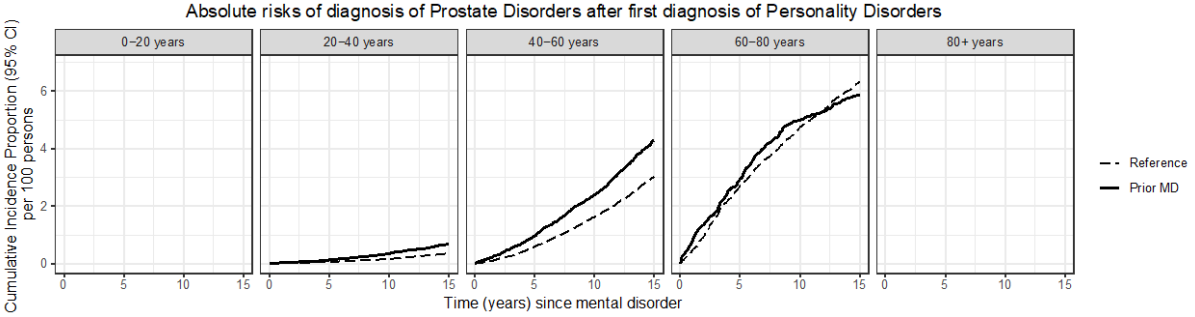


Figure S129.19 – Connective Tissue Disorders

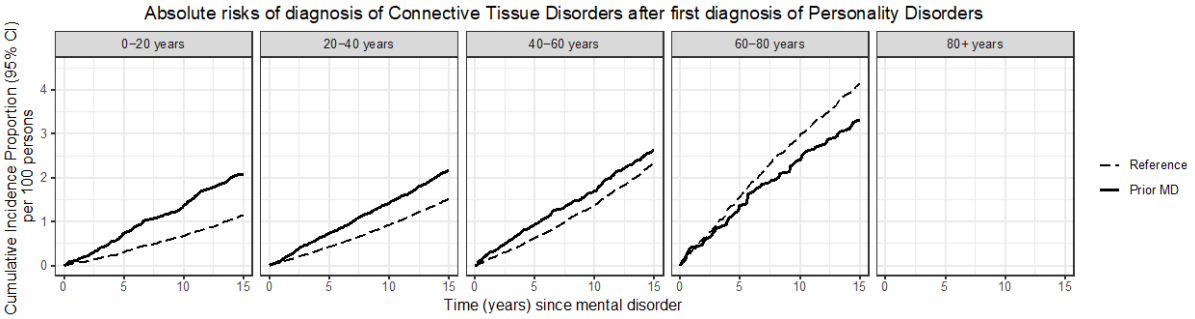


Figure S129.20 – Osteoporosis

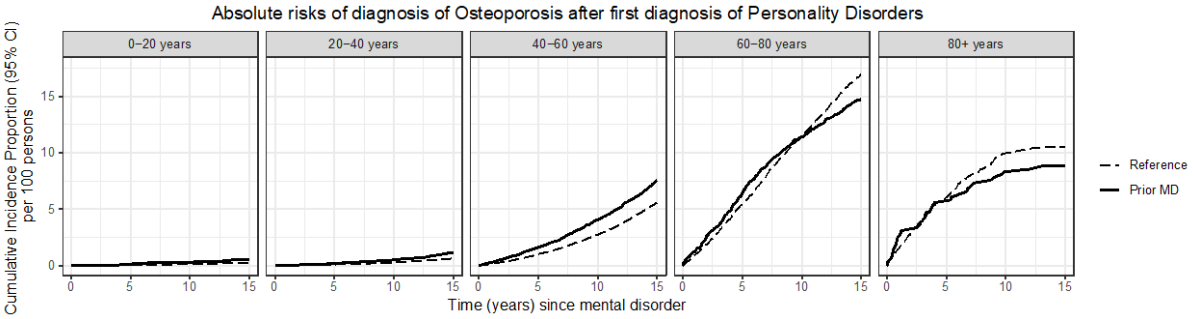


Figure S129.21 – Painful Conditions

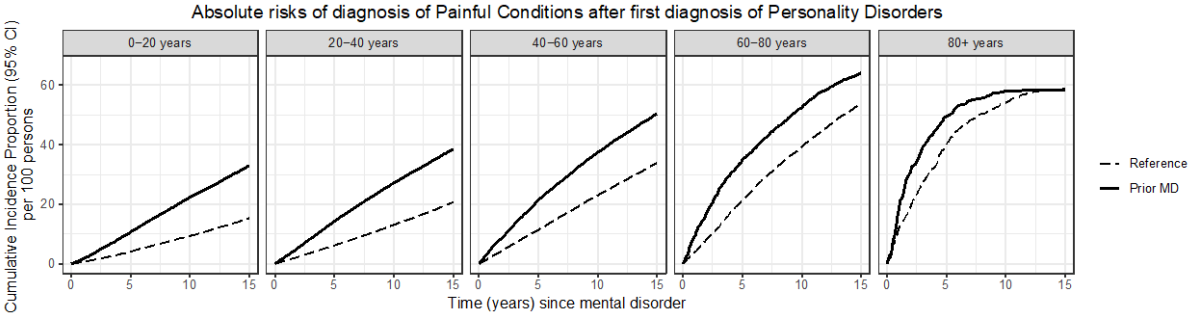


Figure S129.22 – HIV/AIDS

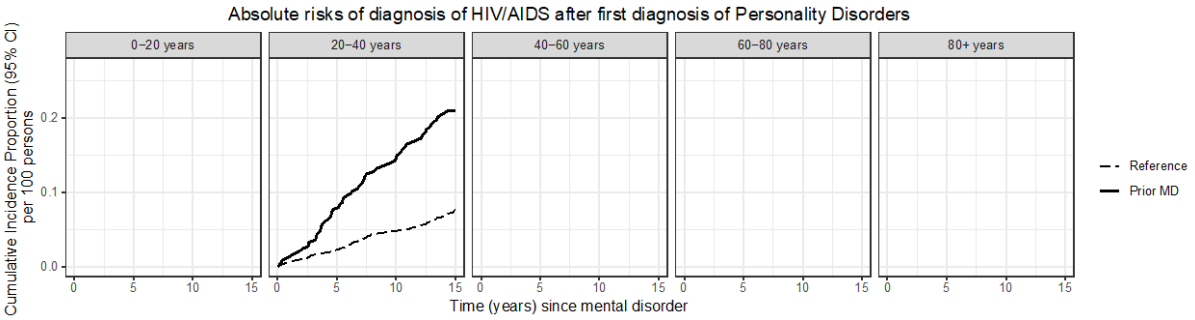


Figure S129.23 – Anemias

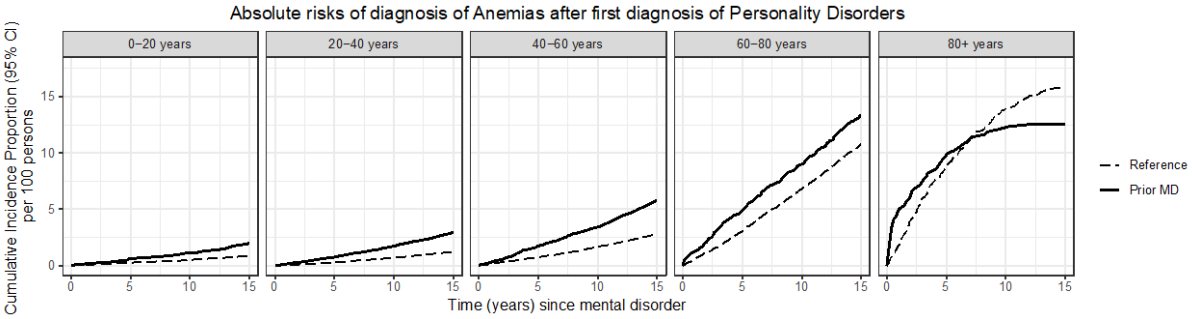


Figure S129.24 – Cancer

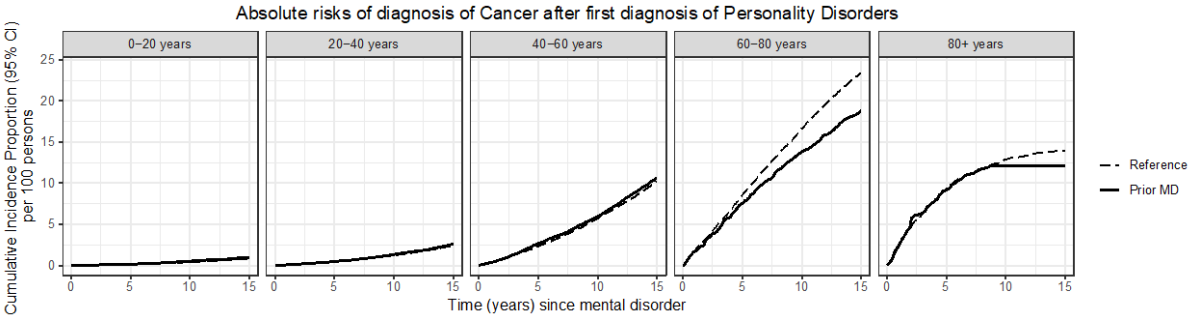


Figure S129.25 – Vision Problems

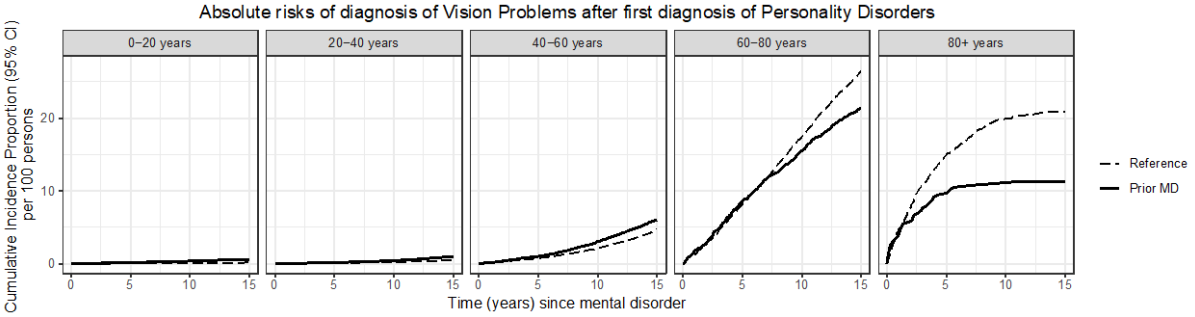


Figure S129.26 – Hearing Problems

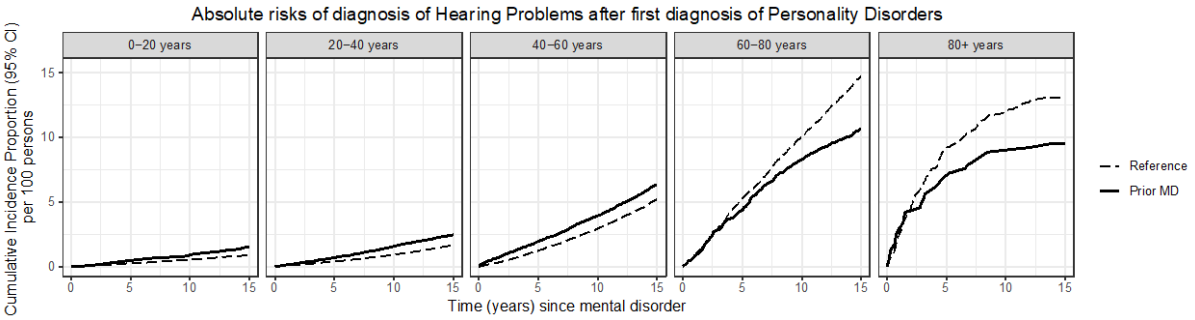


Figure S129.27 – Migraine

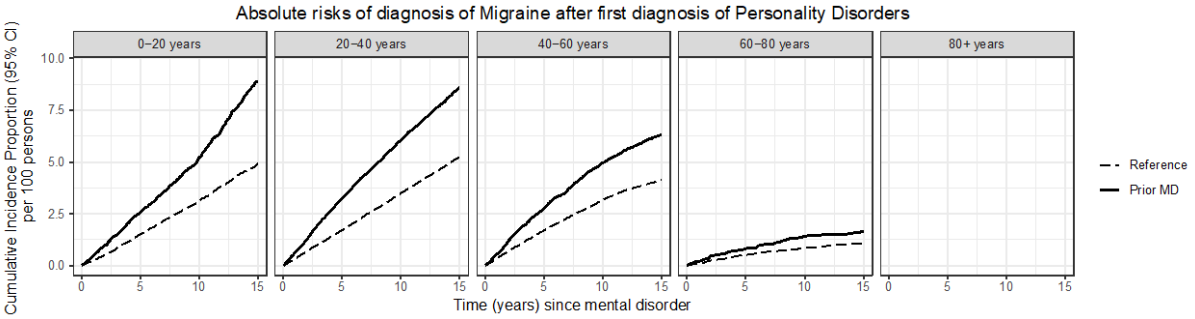


Figure S129.28 – Epilepsy

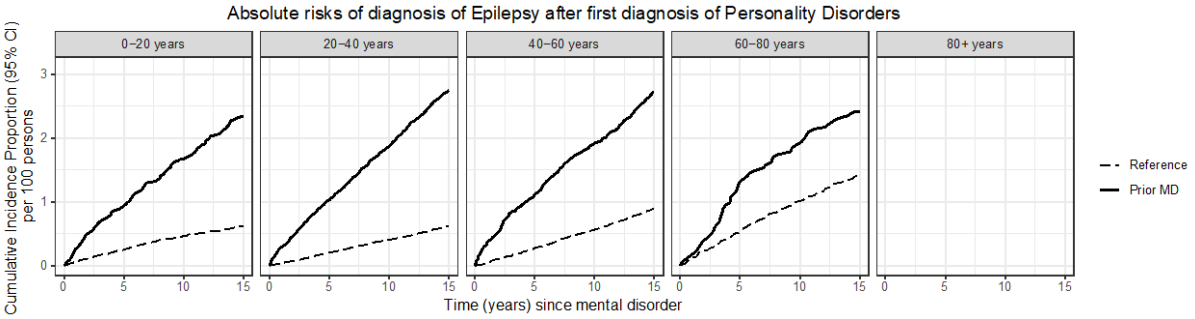


Figure S129.29 – Parkinson's Disease

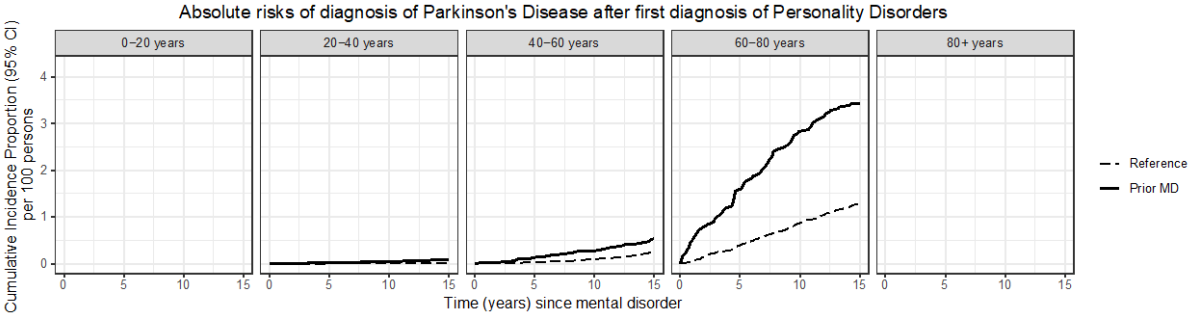


Figure S129.30 – Multiple Sclerosis

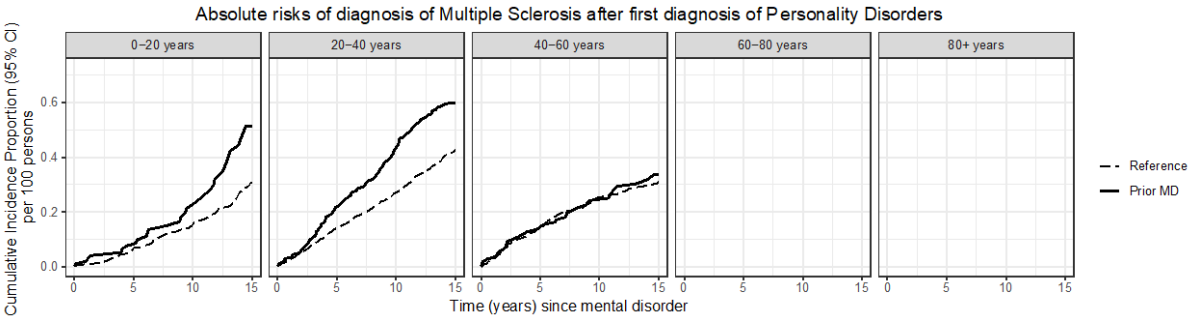
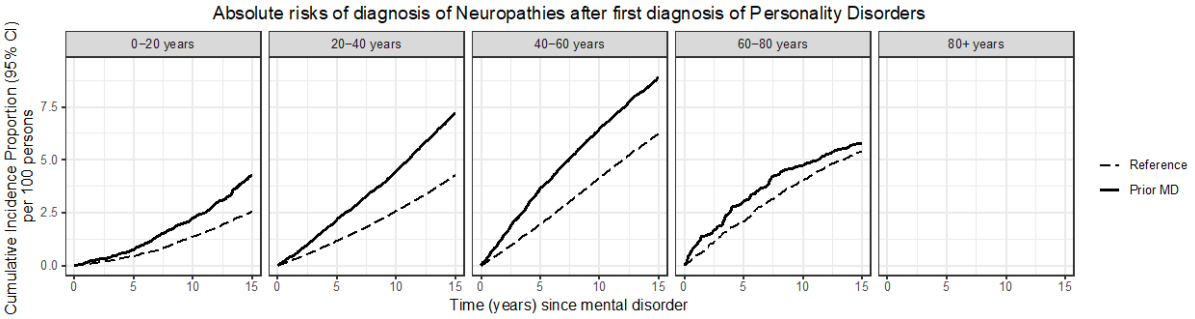


Figure S129.31 – Neuropathies



Figures S130.1-S130.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Intellectual Disabilities.

Figure S130.1 - Hypertension

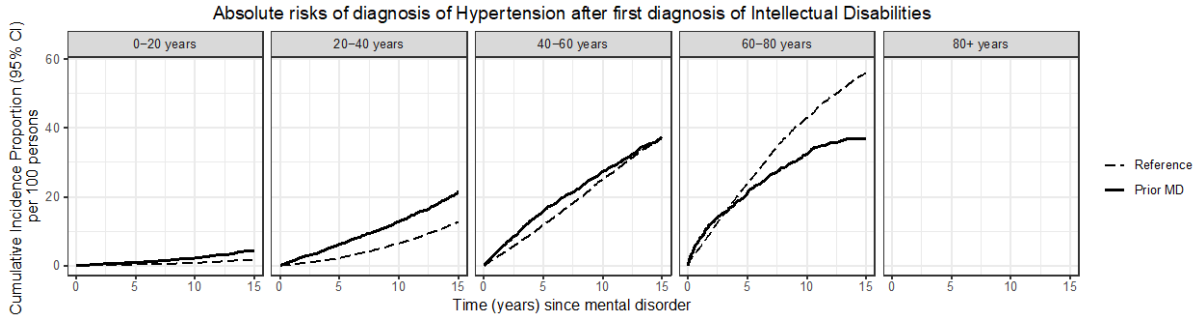


Figure S130.2 – Dyslipidemia

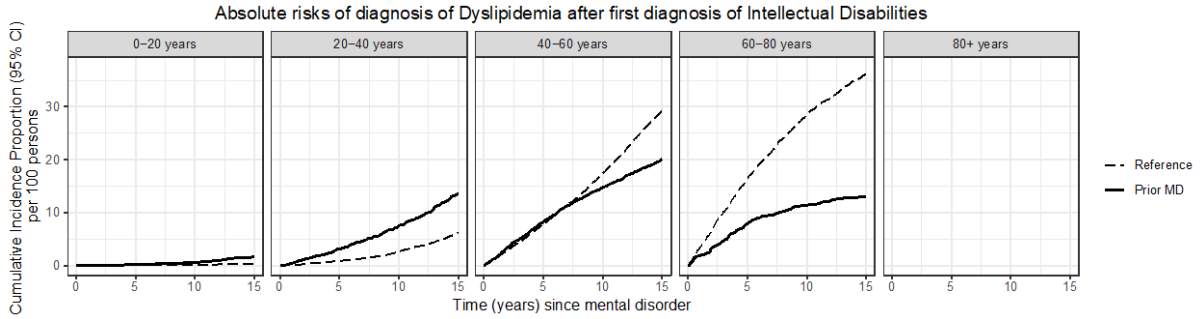


Figure S130.3 – Ischemic Heart Disease

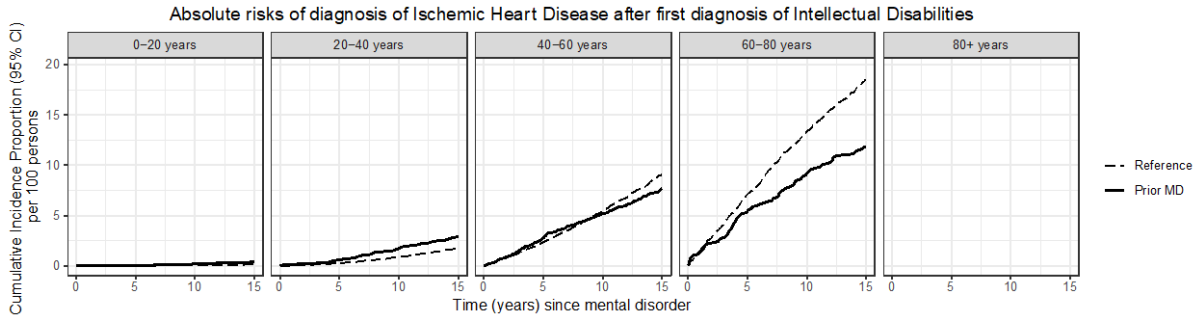


Figure S130.4 – Atrial Fibrillation

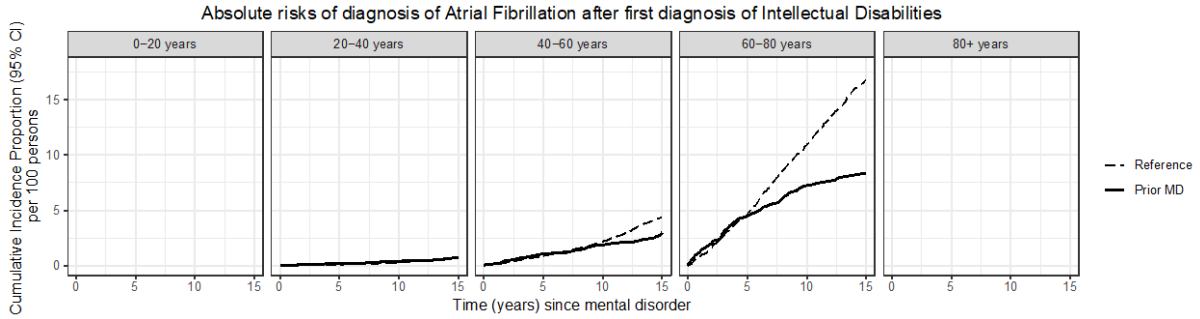


Figure S130.5 –Heart Failure

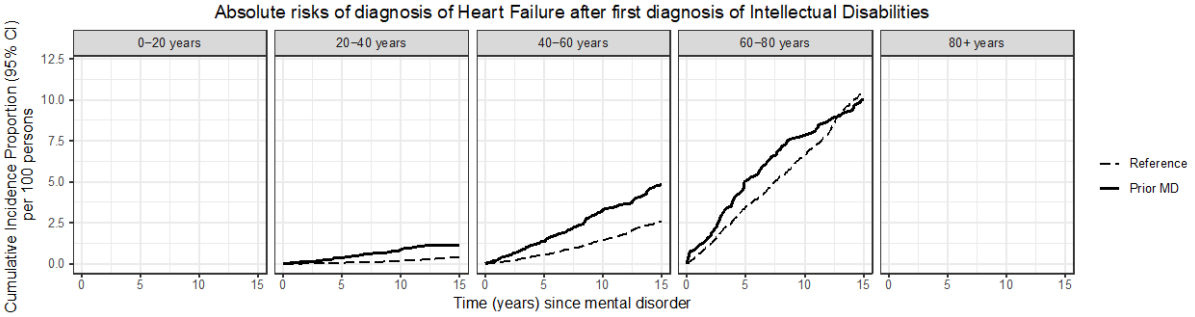


Figure S130.6 – Peripheral Artery Occlusive Disease

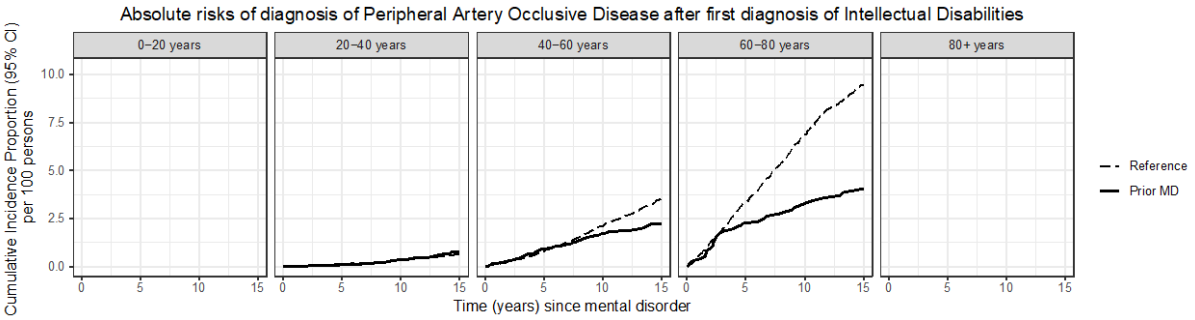


Figure S130.7 – Stroke

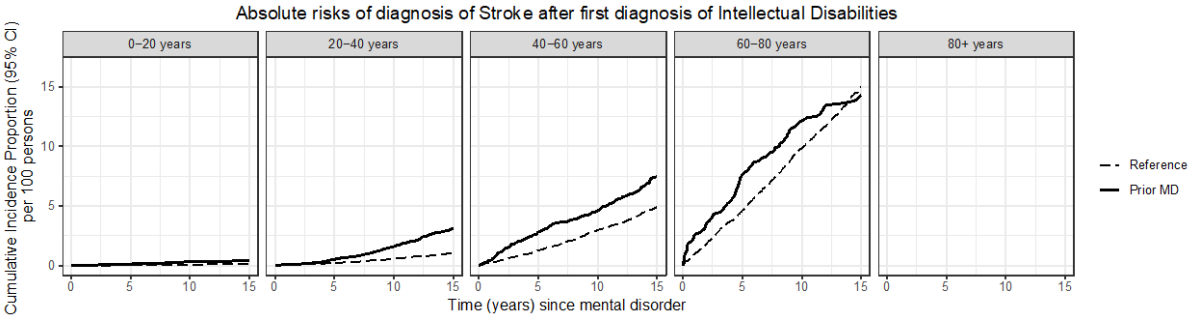


Figure S130.8 – Diabetes Mellitus

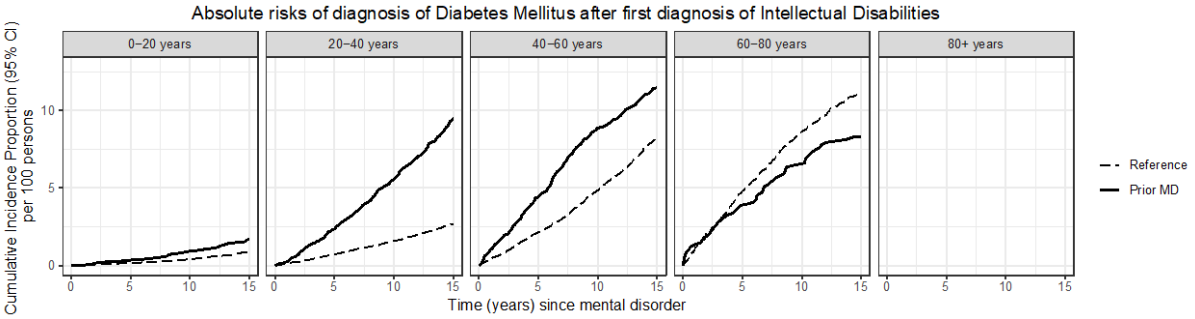


Figure S130.9 – Thyroid Disorders

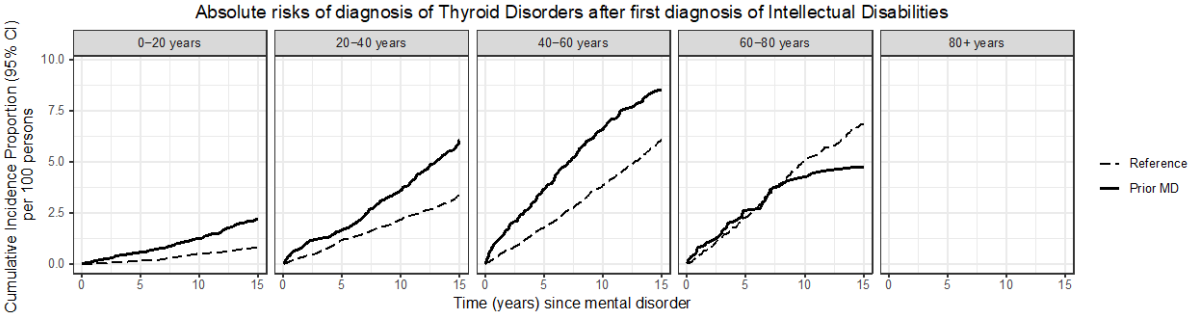


Figure S130.10 – Gout

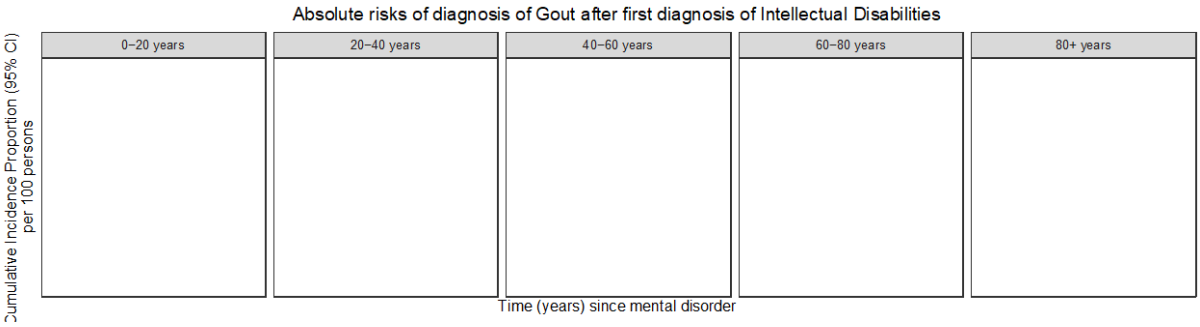


Figure S130.11 – Chronic Pulmonary Disease

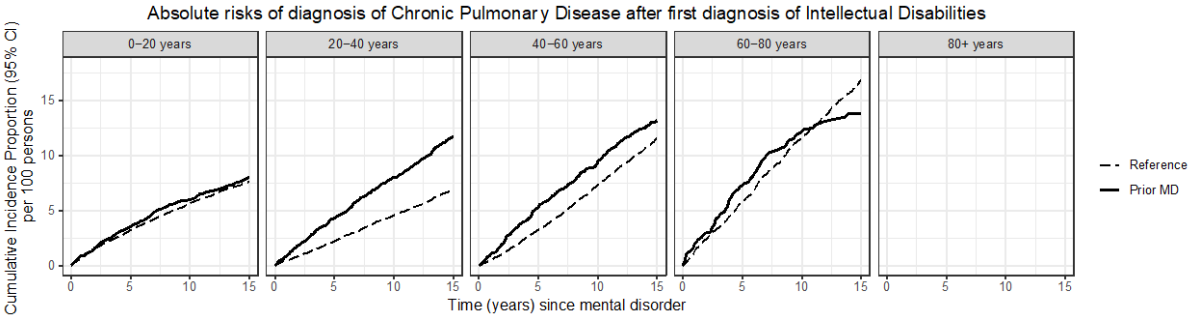


Figure S130.12 – Allergy

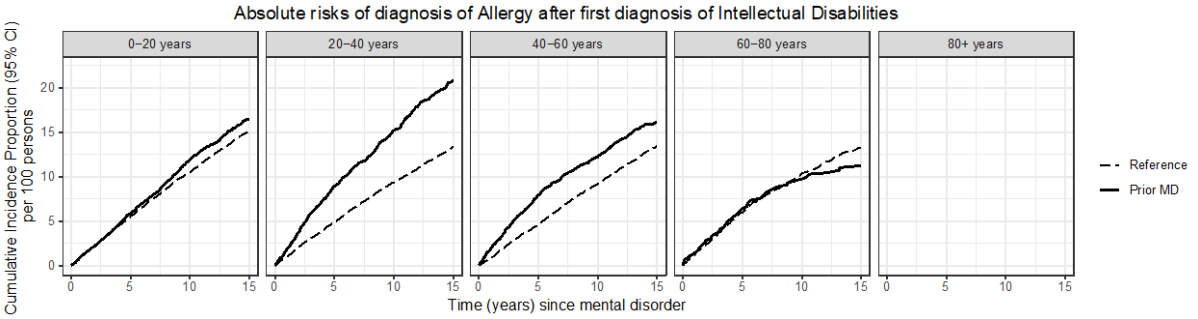


Figure S130.13 – Ulcer/Chronic Gastritis

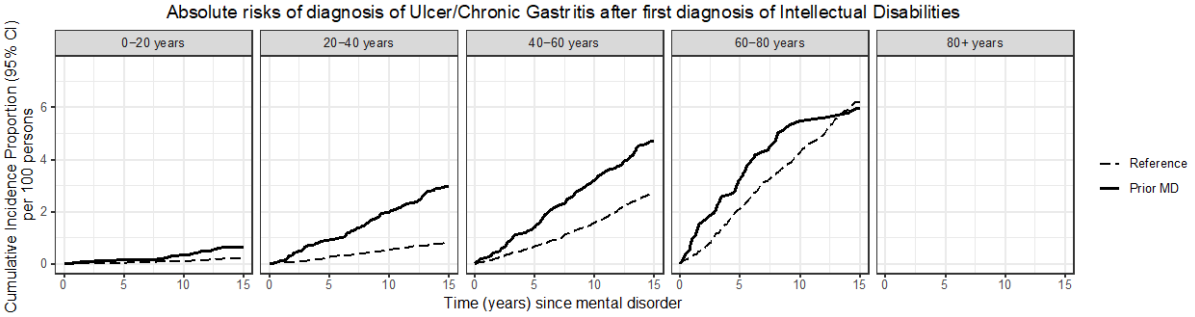


Figure S130.14 – Chronic Liver Disease

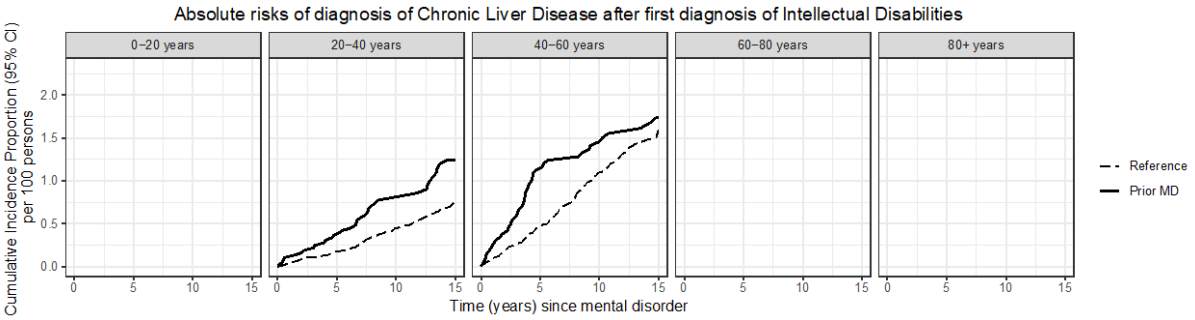


Figure S130.15 – Inflammatory Bowel Disease

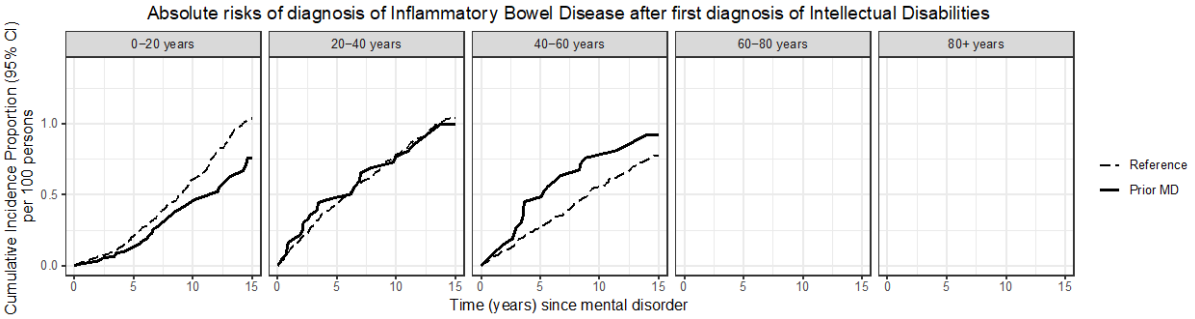


Figure S130.16 – Diverticular Disease of the Intestine

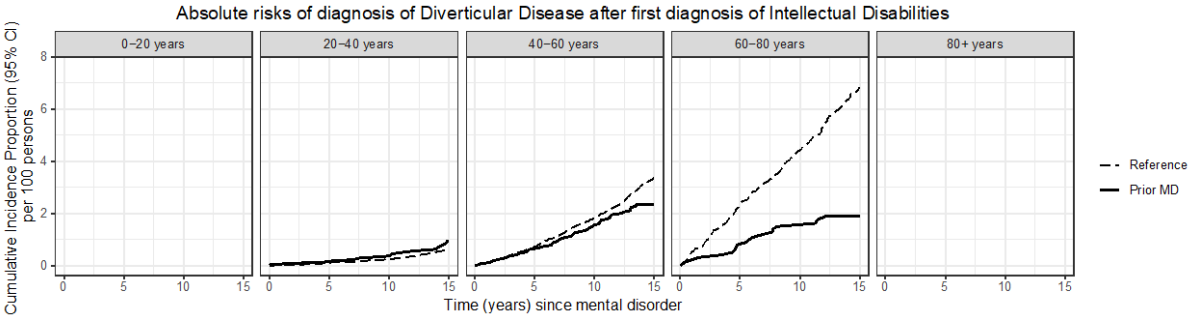


Figure S130.17 – Chronic Kidney Disease

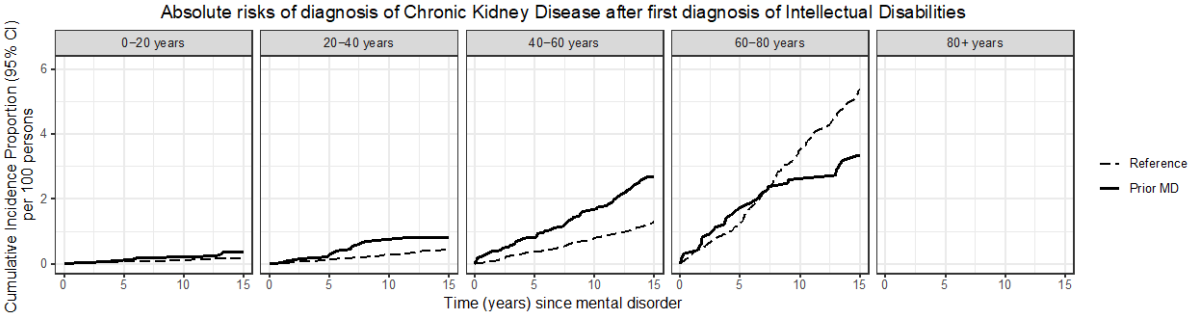


Figure S130.18 – Prostate Disorders

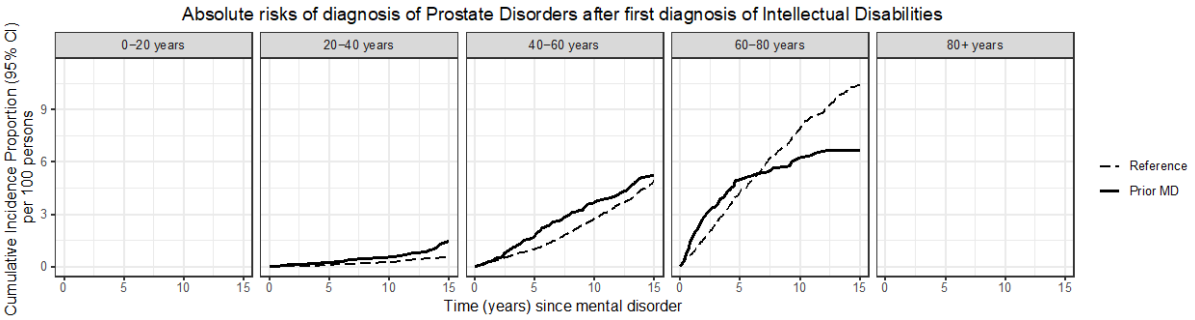


Figure S130.19 – Connective Tissue Disorders

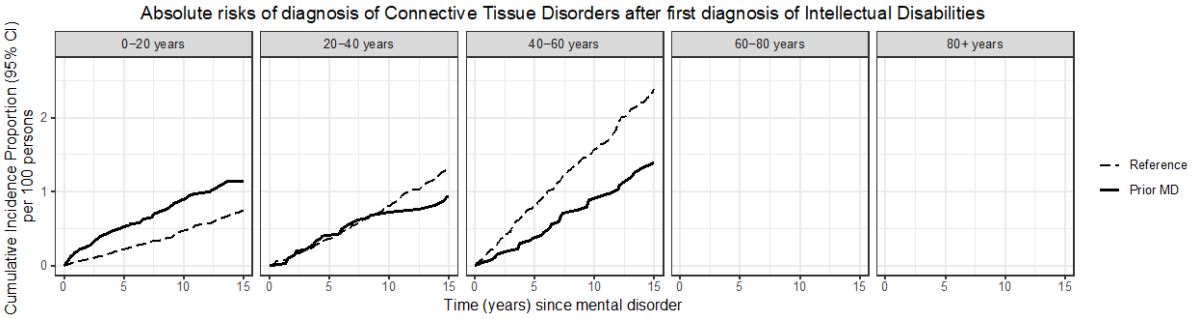


Figure S130.20 – Osteoporosis

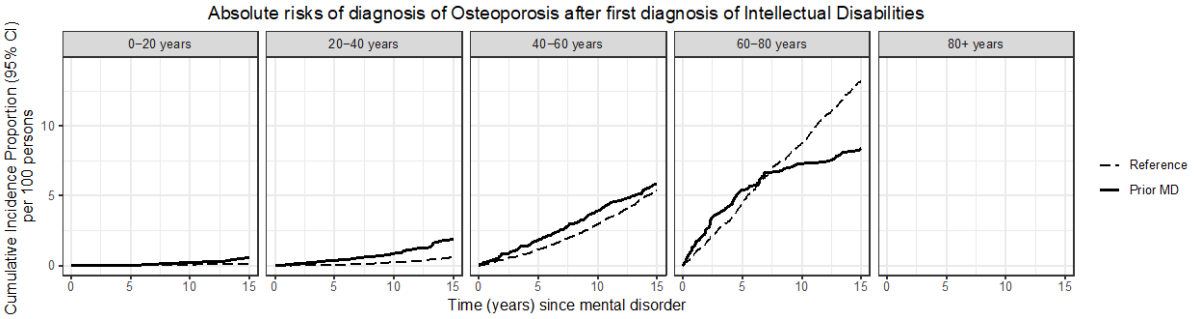


Figure S130.21 – Painful Conditions

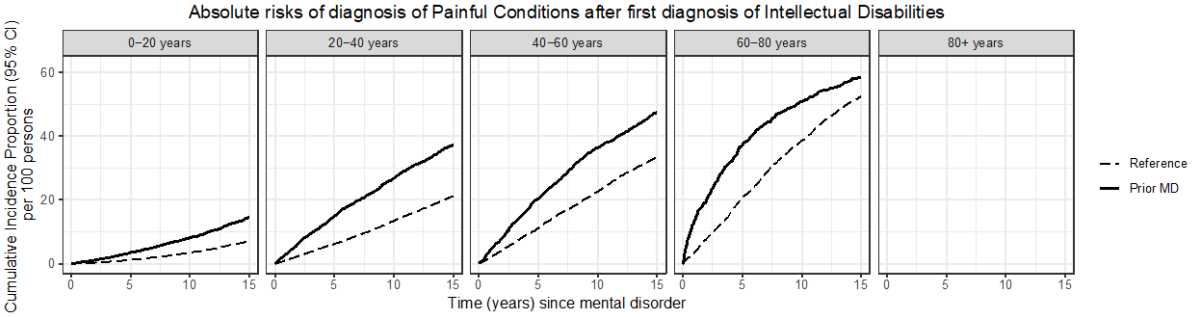


Figure S130.22 – HIV/AIDS

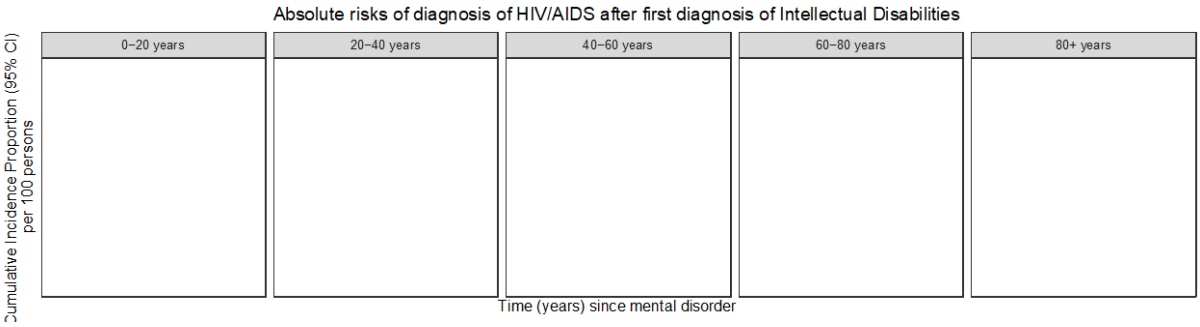


Figure S130.23 – Anemias

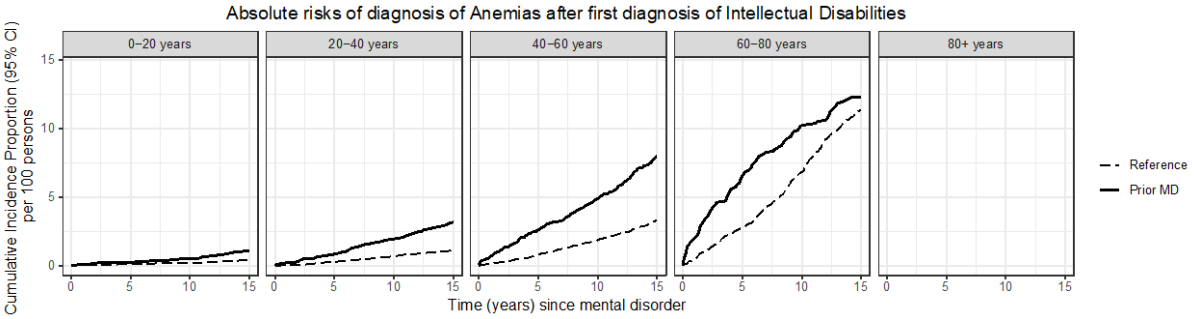


Figure S130.24 – Cancer

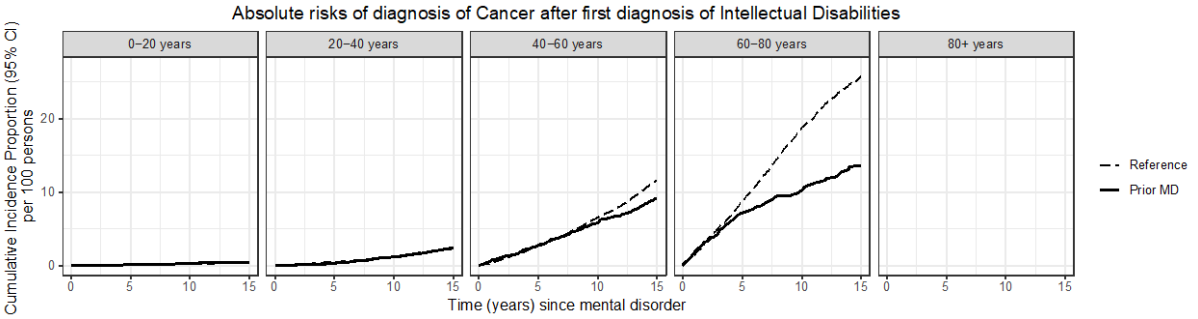


Figure S130.25 – Vision Problems

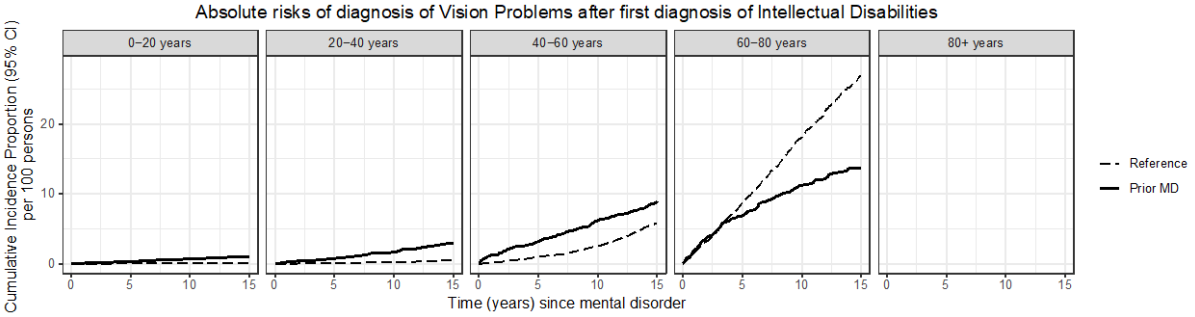


Figure S130.26 – Hearing Problems

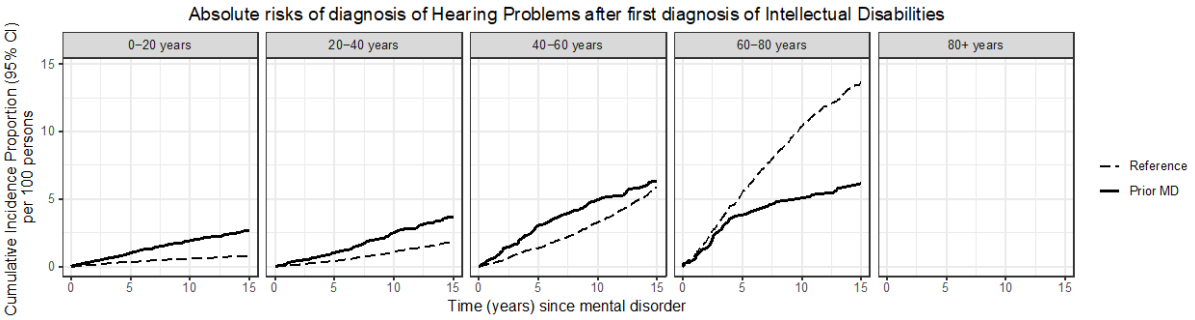


Figure S130.27 – Migraine

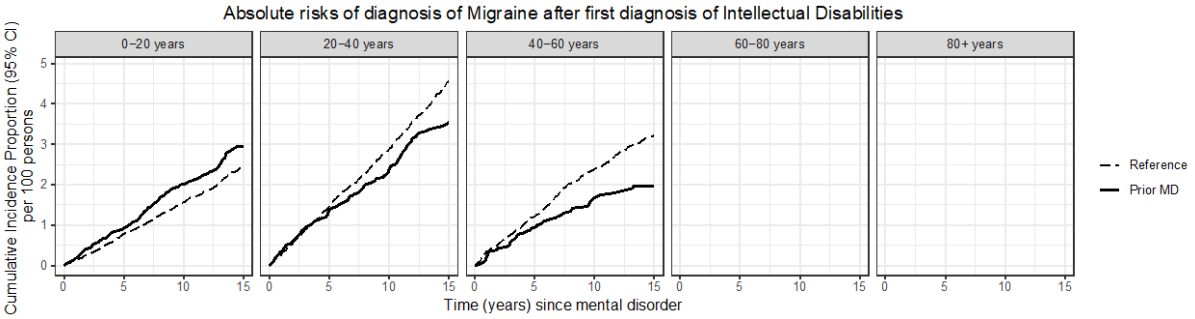


Figure S130.28 – Epilepsy

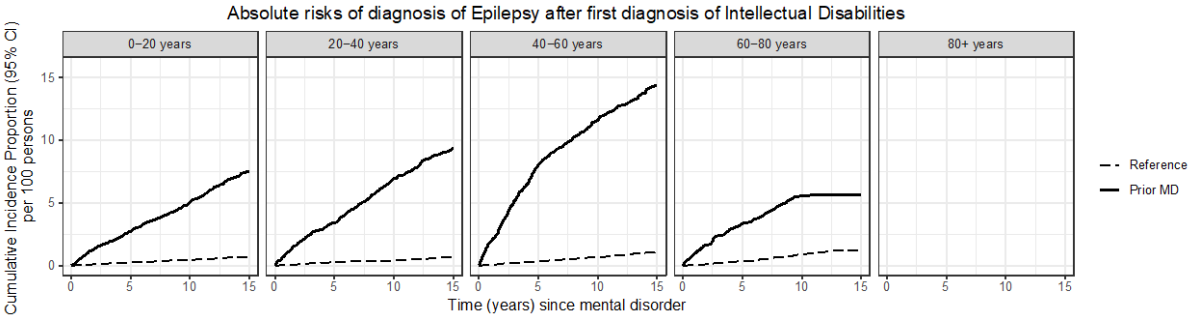


Figure S130.29 – Parkinson's Disease

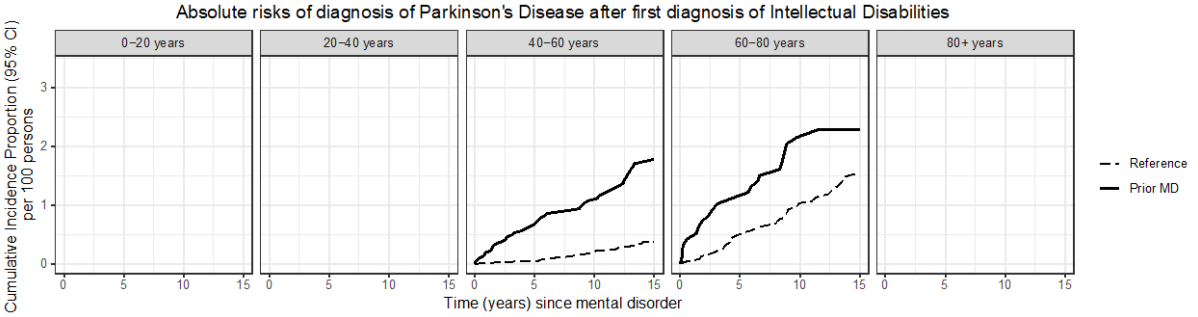


Figure S130.30 – Multiple Sclerosis

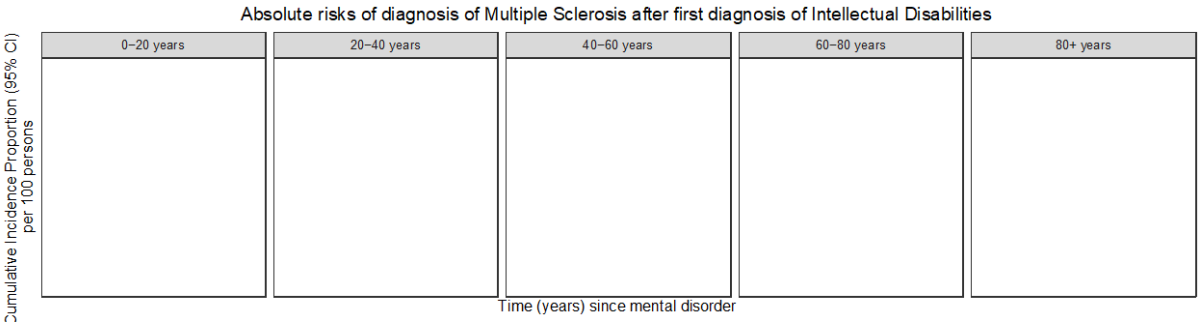
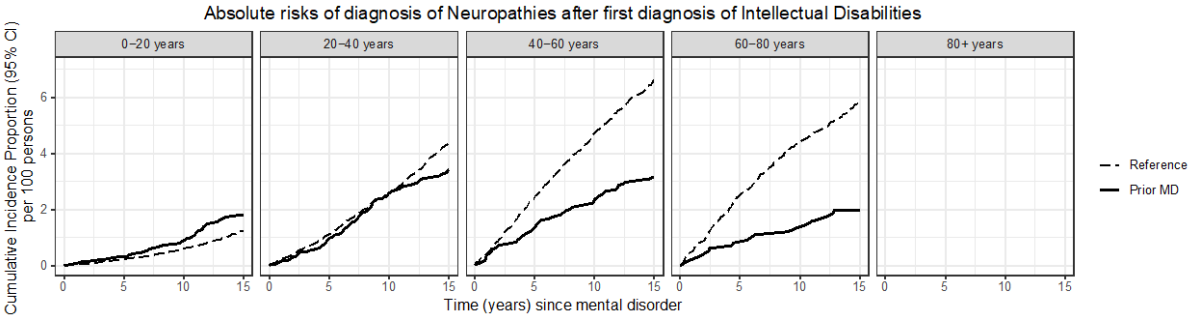


Figure S130.31 – Neuropathies



Figures S131.1-S131.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Developmental Disorders

Figure S131.1 - Hypertension

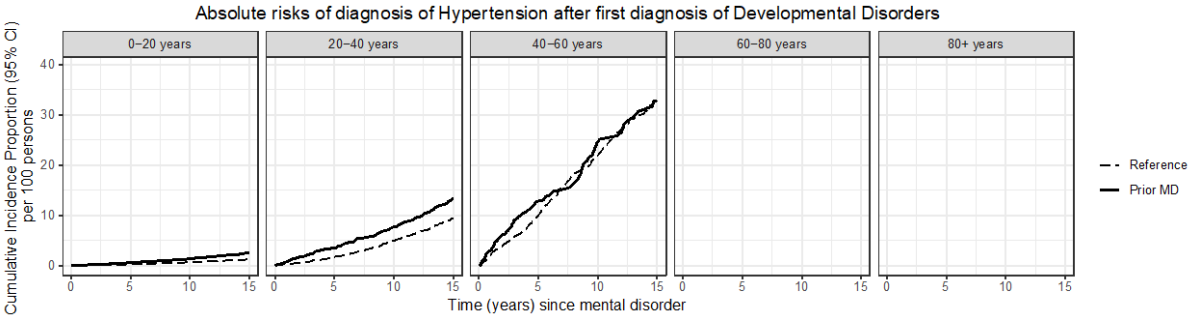


Figure S131.2 – Dyslipidemia

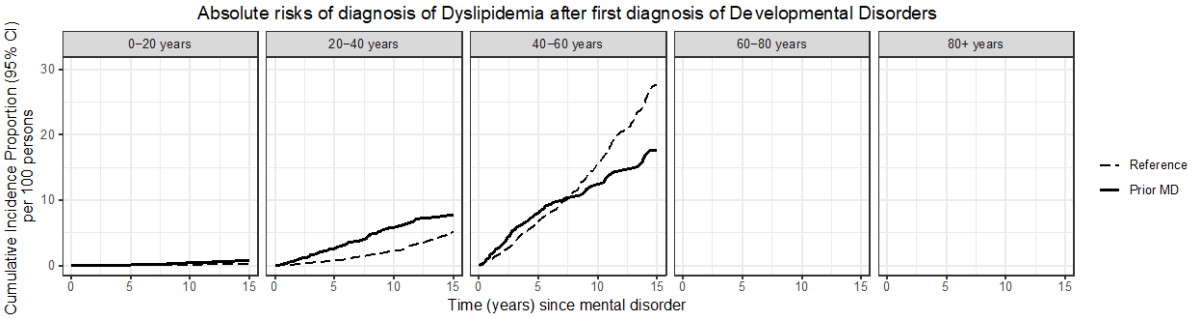


Figure S131.3 – Ischemic Heart Disease

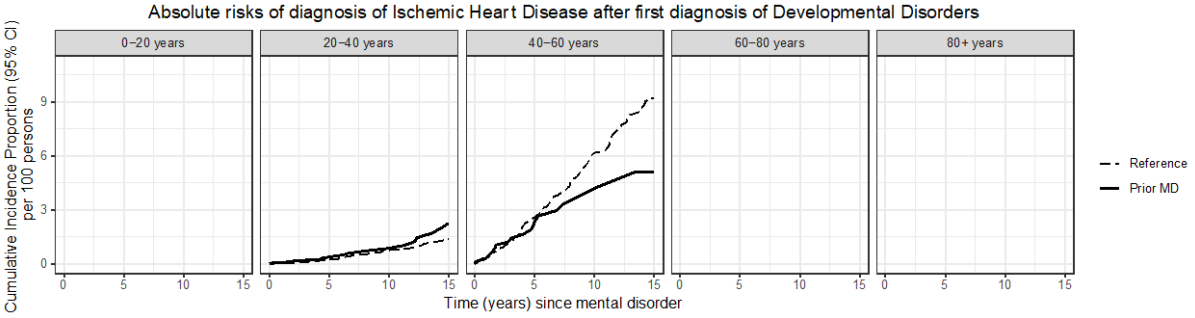


Figure S131.4 – Atrial Fibrillation

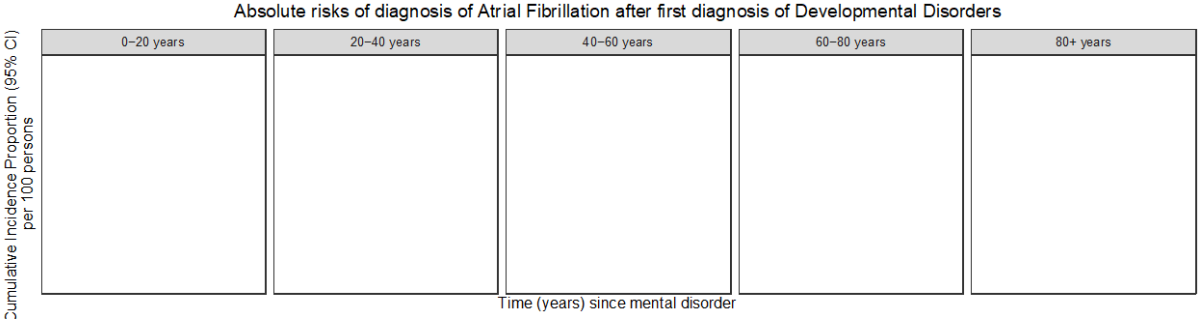


Figure S131.5 – Heart Failure

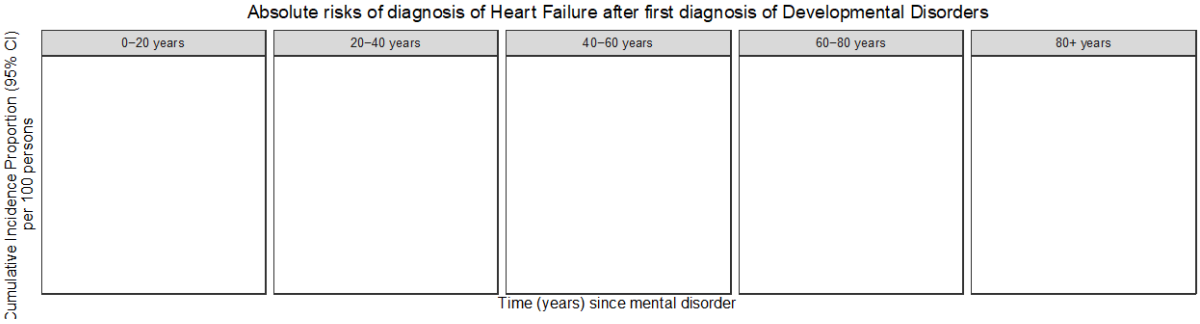


Figure S131.6 – Peripheral Artery Occlusive Disease

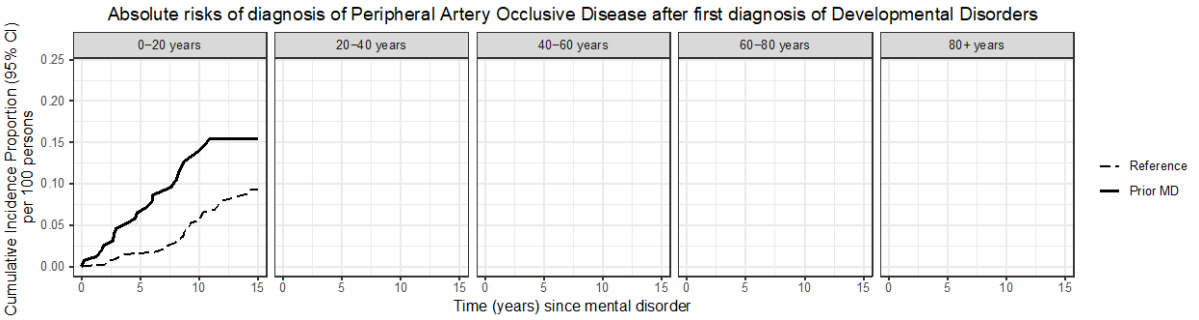


Figure S131.7 – Stroke

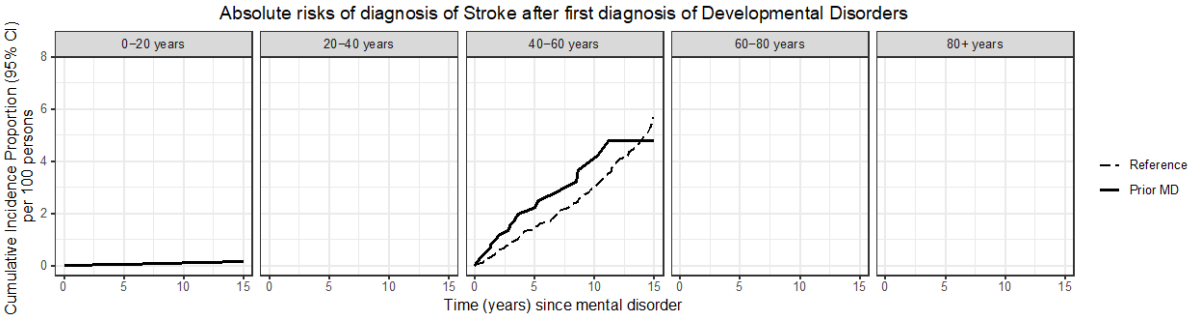


Figure S131.8 – Diabetes Mellitus

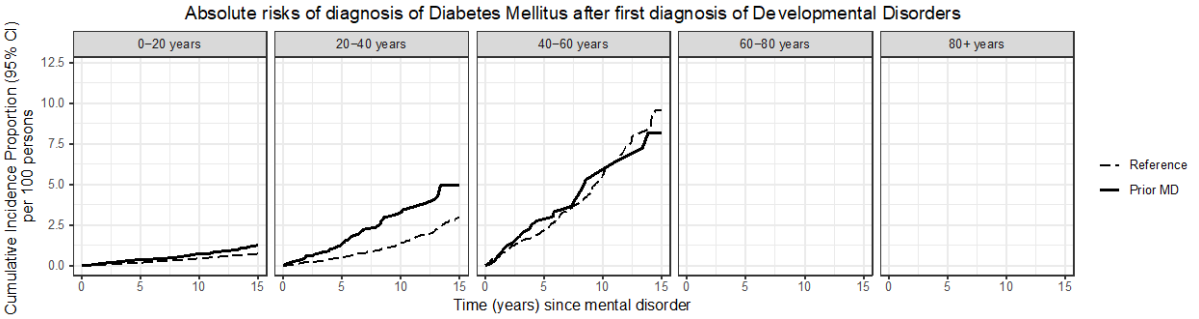


Figure S131.9 – Thyroid Disorders

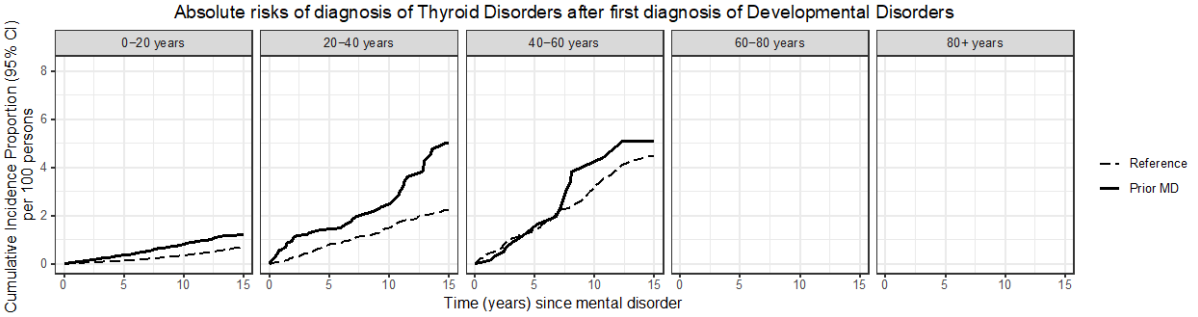


Figure S131.10 – Gout

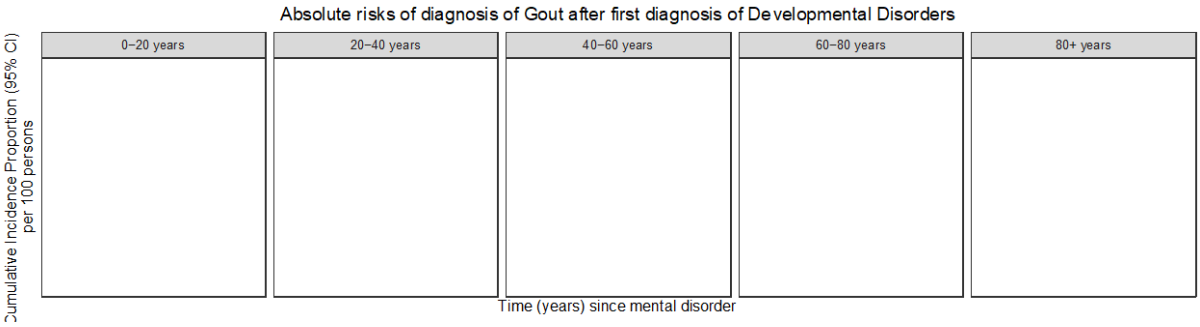


Figure S131.11 – Chronic Pulmonary Disease

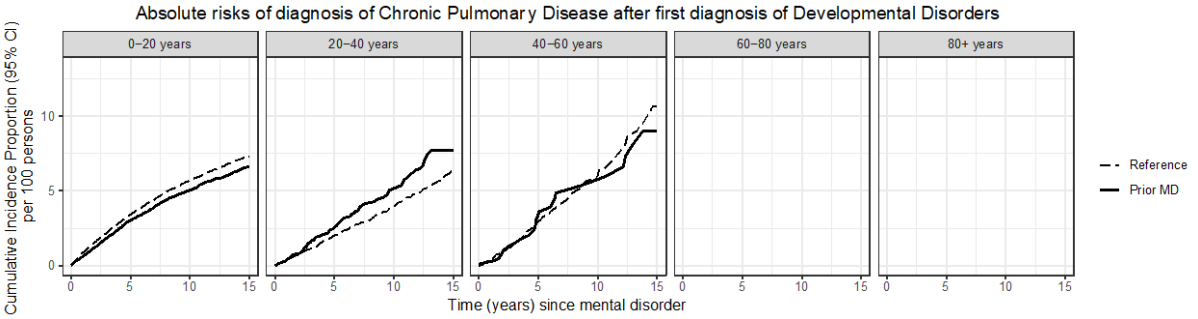


Figure S131.12 – Allergy

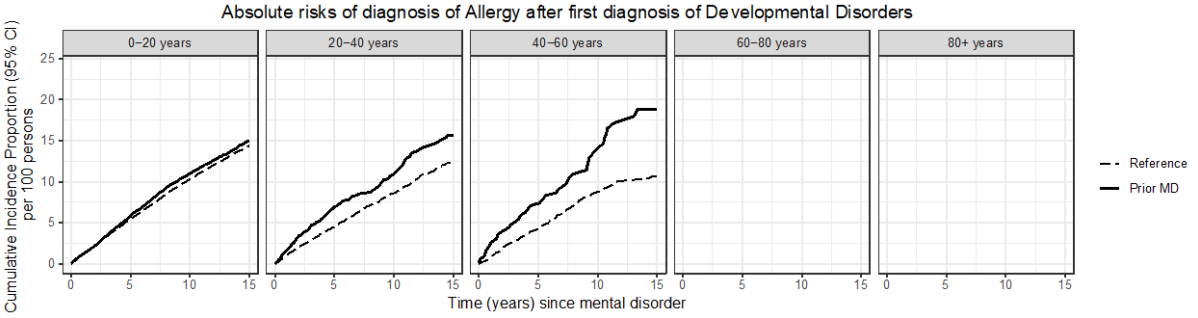


Figure S131.13 – Ulcer/Chronic Gastritis

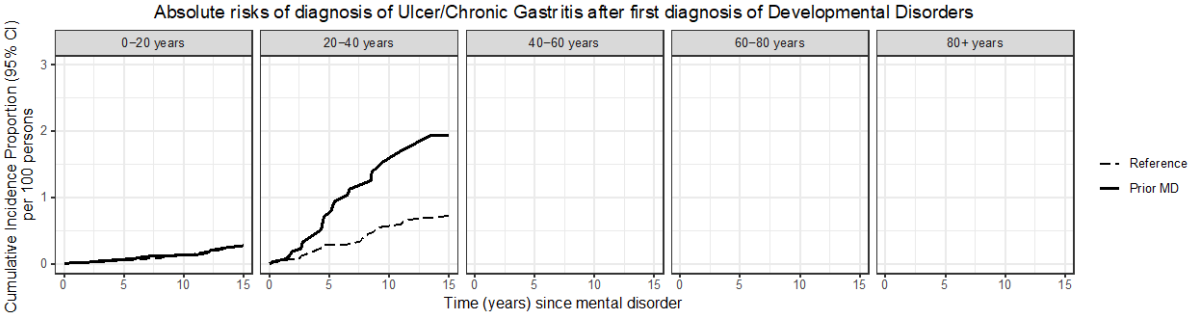


Figure S131.14 – Chronic Liver Disease

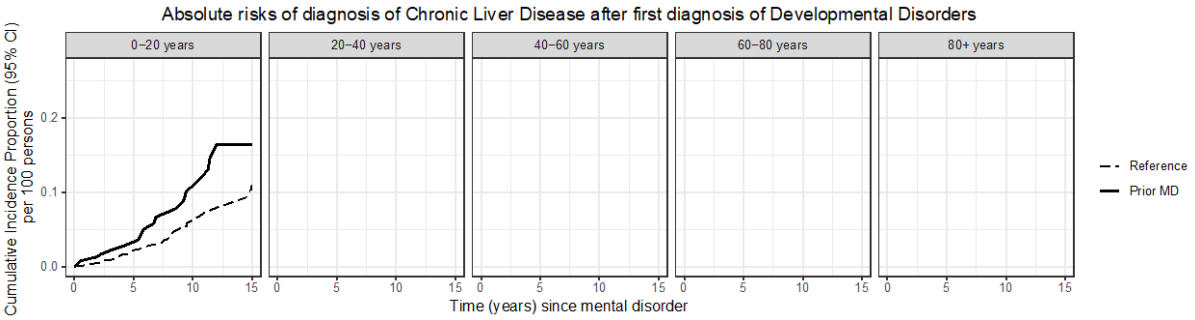


Figure S131.15 – Inflammatory Bowel Disease

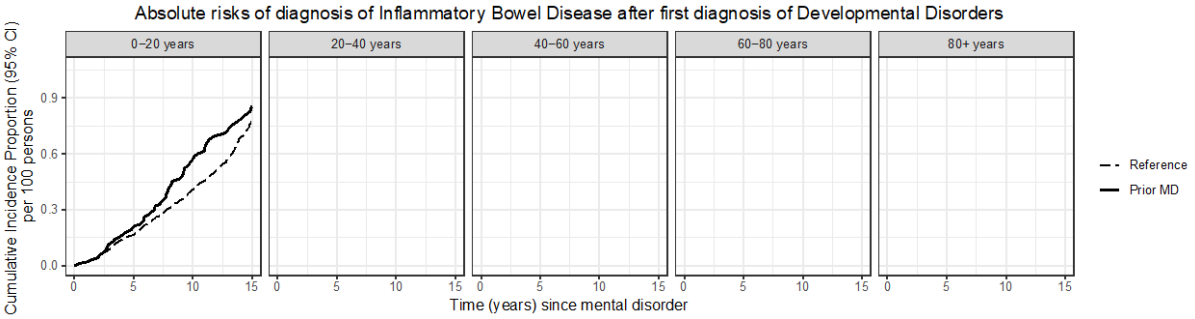


Figure S131.16 – Diverticular Disease of the Intestine

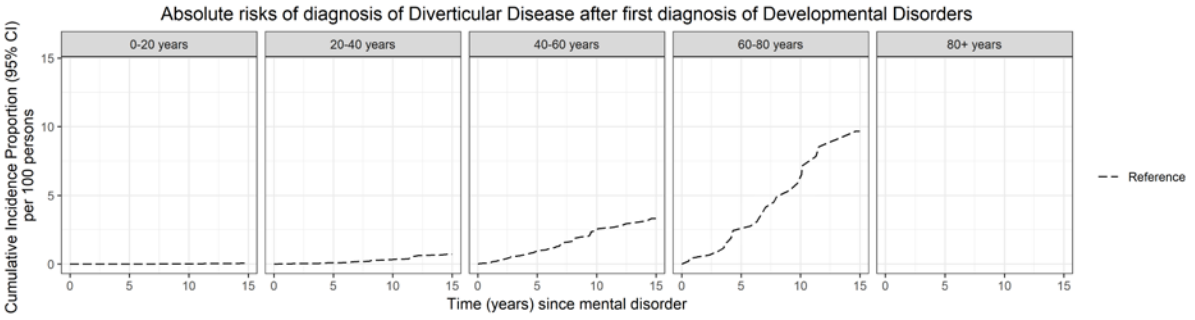


Figure S131.17 – Chronic Kidney Disease

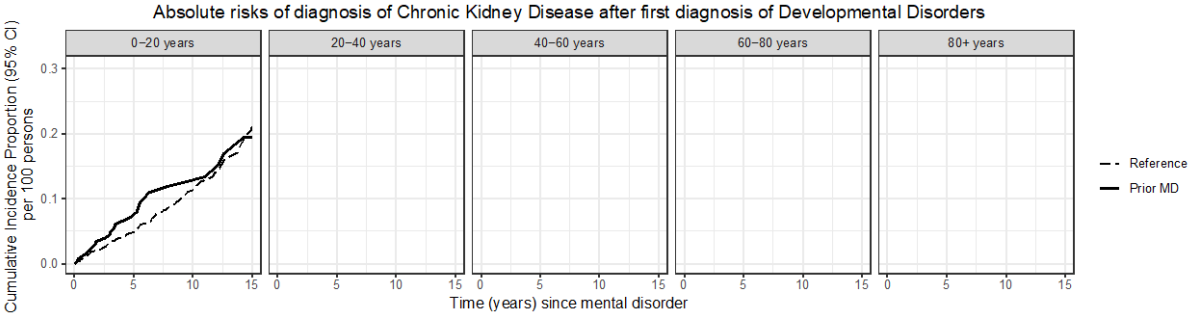


Figure S131.18 – Prostate Disorders

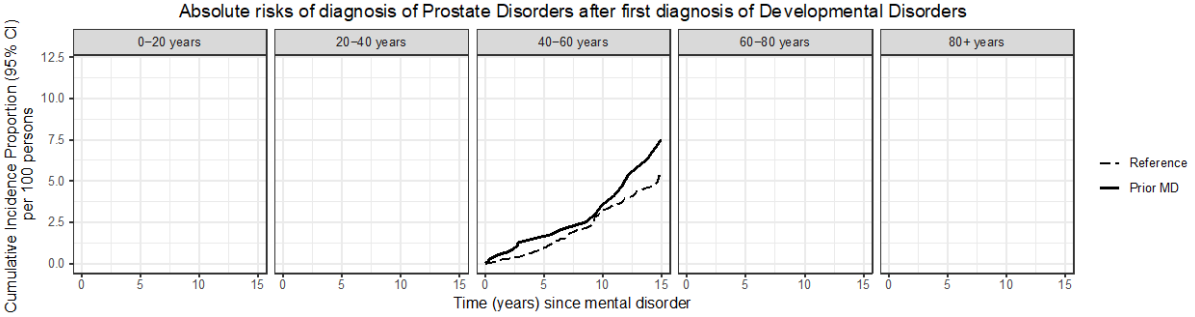


Figure S131.19 – Connective Tissue Disorders

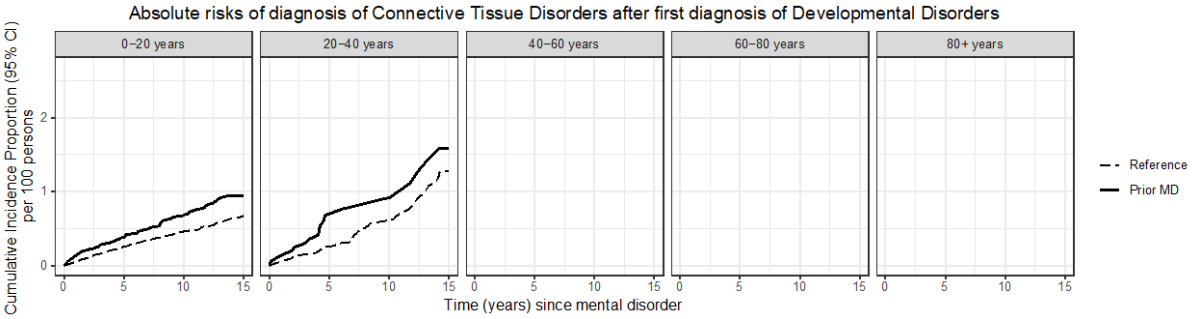


Figure S131.20 – Osteoporosis

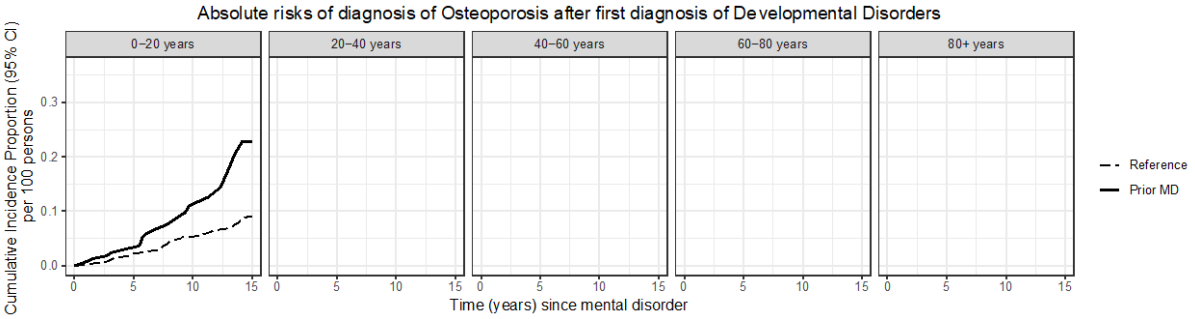


Figure S131.21 – Painful Conditions

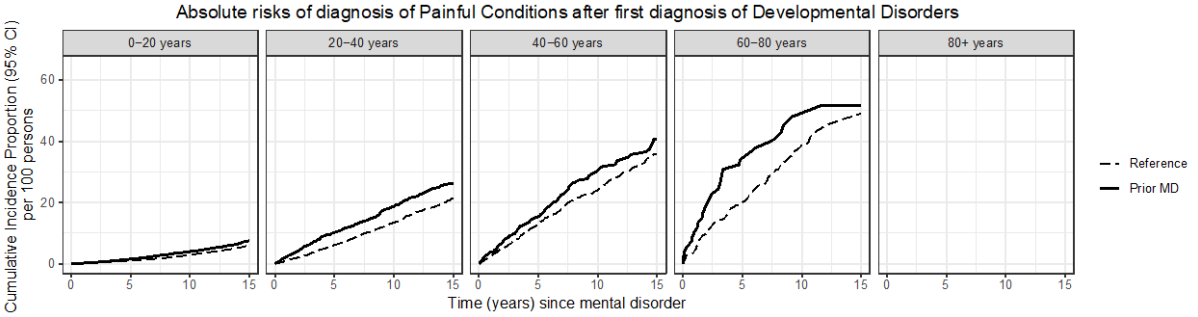


Figure S131.22 – HIV/AIDS

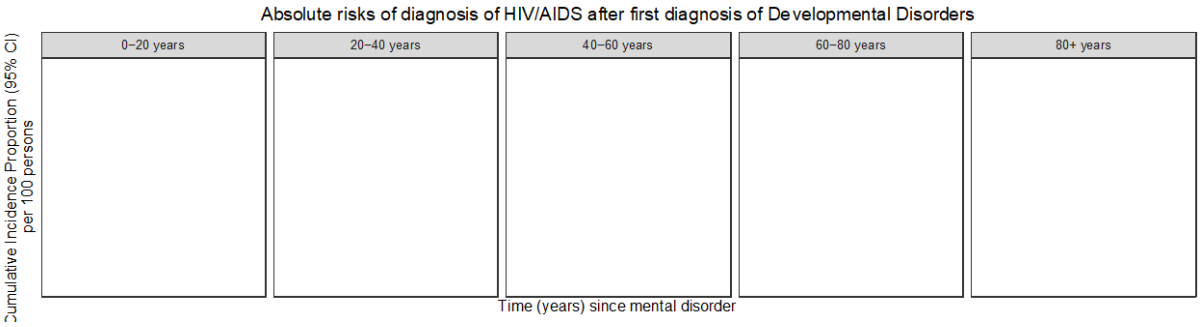


Figure S131.23 – Anemias

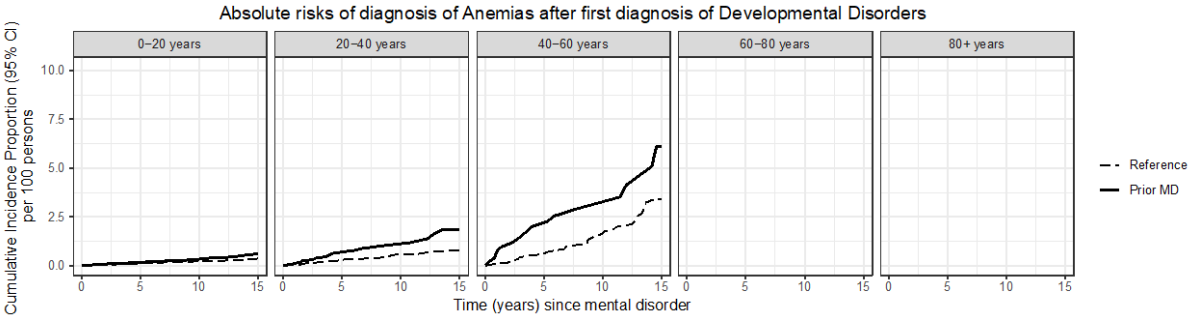


Figure S131.24 – Cancer

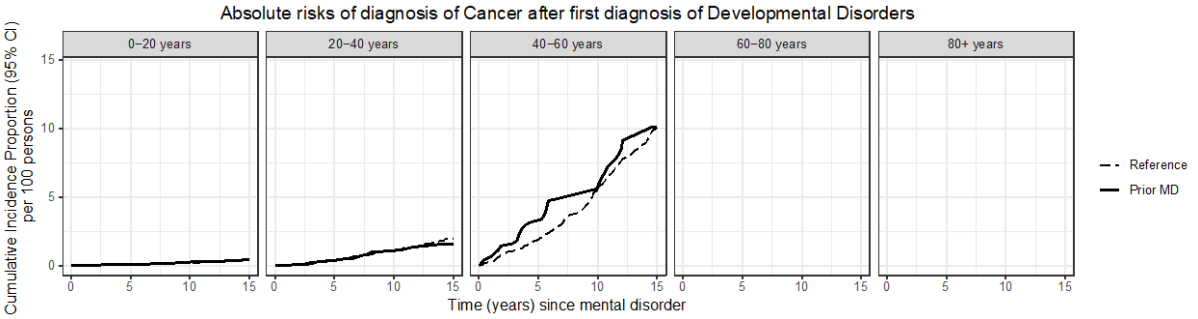


Figure S131.25 – Vision Problems

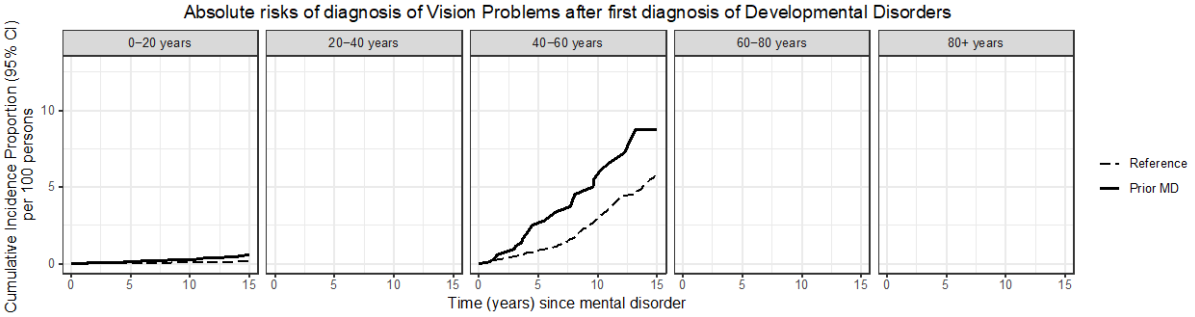


Figure S131.26 – Hearing Problems

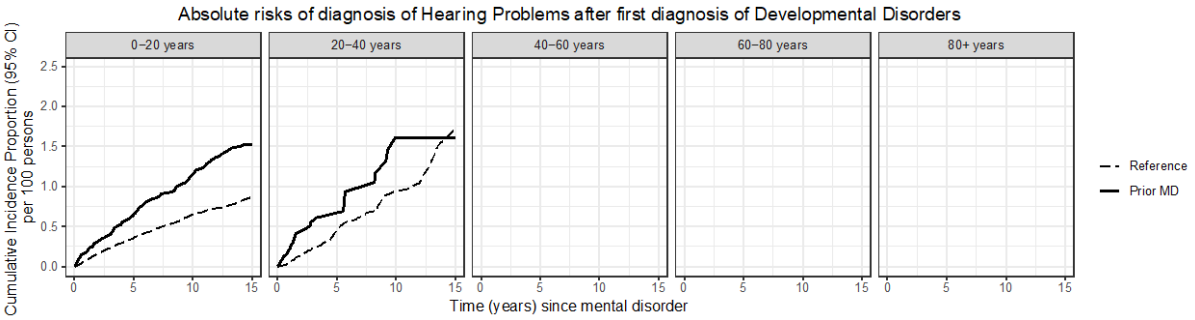


Figure S131.27 – Migraine

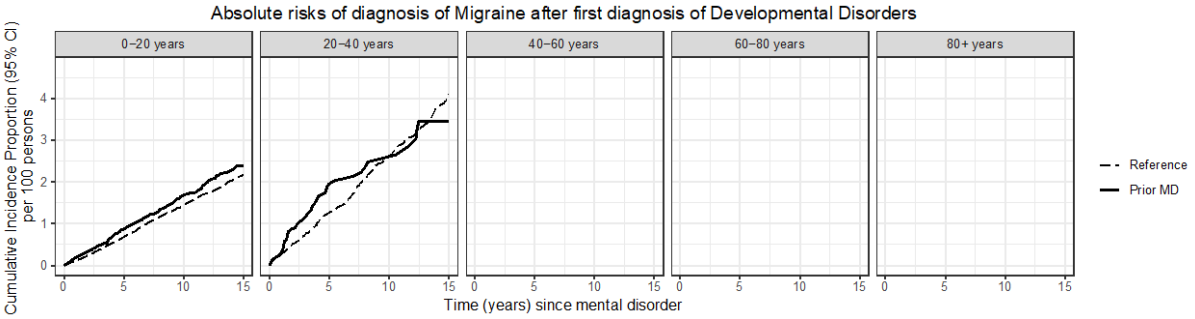


Figure S131.28 – Epilepsy

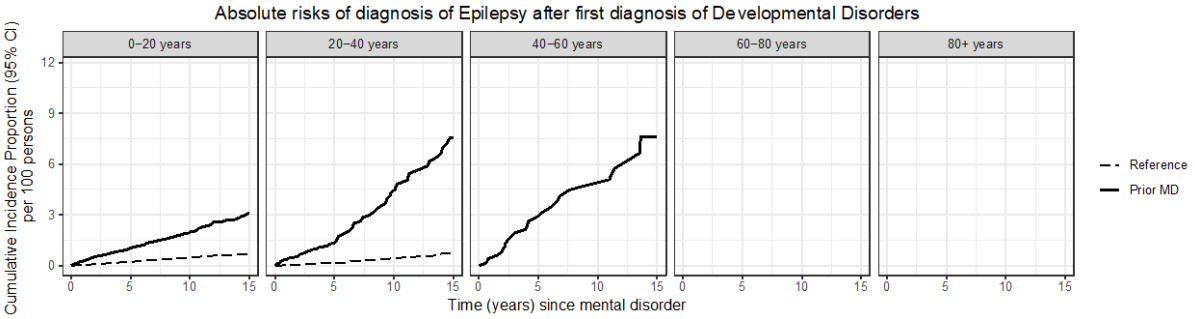


Figure S131.29 – Parkinson's Disease

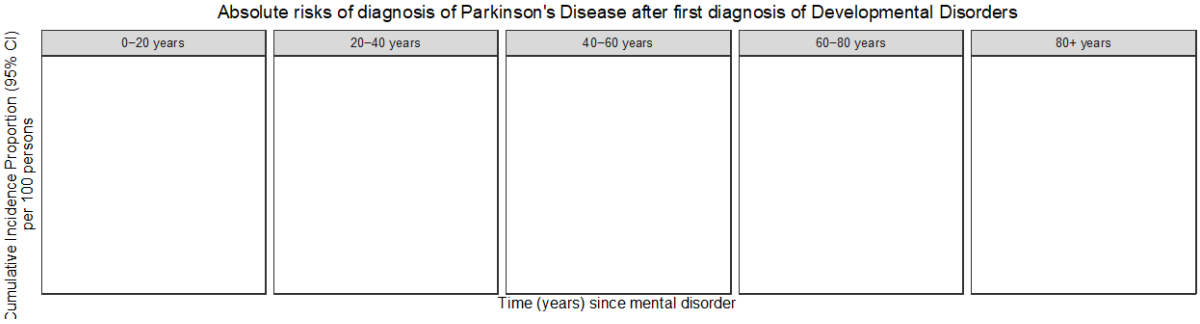


Figure S131.30 – Multiple Sclerosis

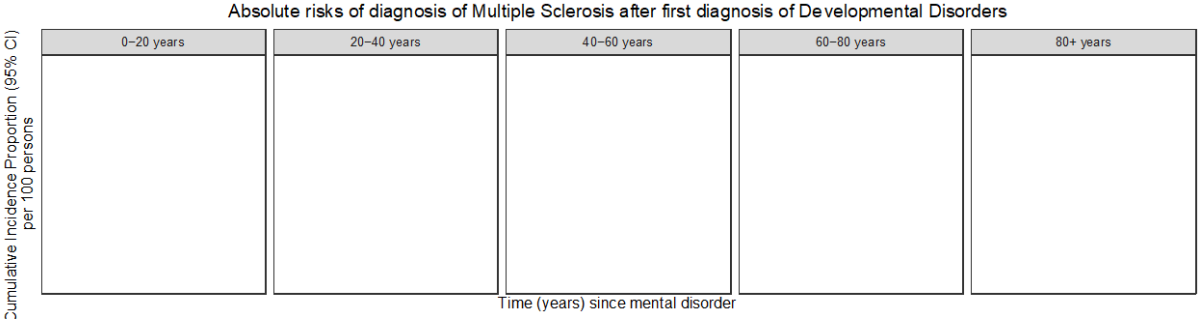
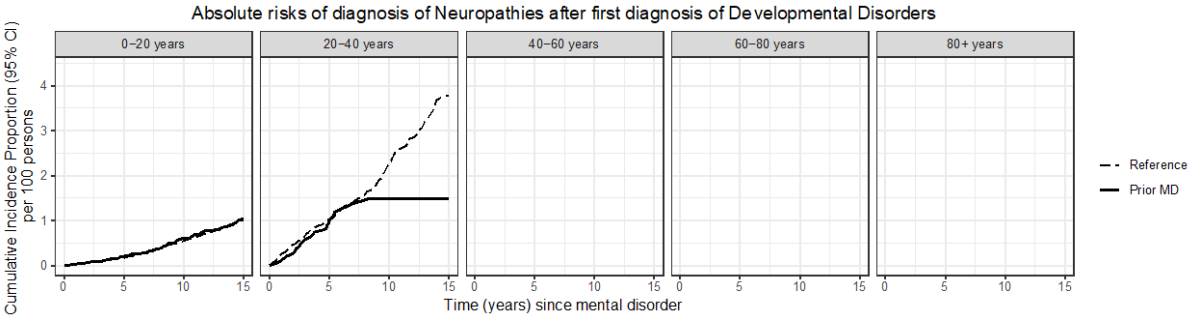


Figure S131.31 – Neuropathies



Figures S132.1-S132.31. Absolute risks of being diagnosed with general medical conditions after a first diagnosis of Behavioral Disorders

Figure S132.1 - Hypertension

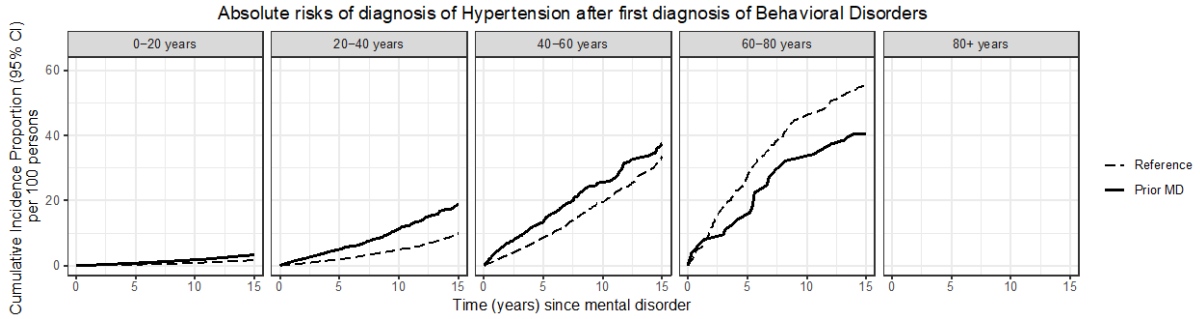


Figure S132.2 – Dyslipidemia

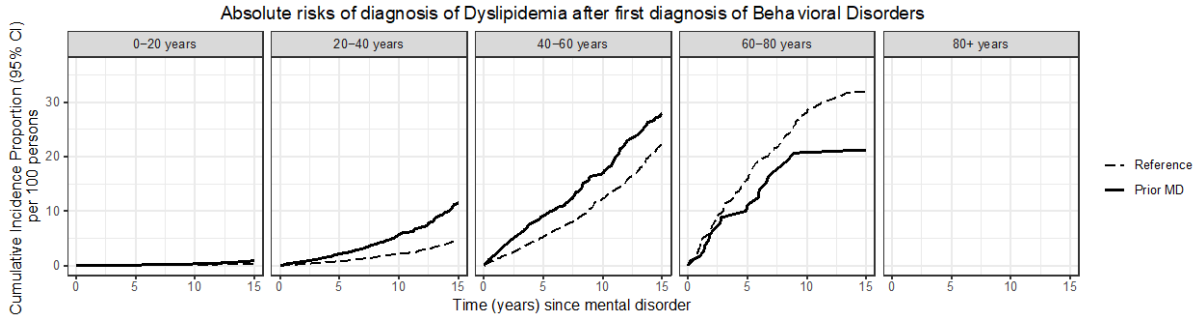


Figure S132.3 – Ischemic Heart Disease

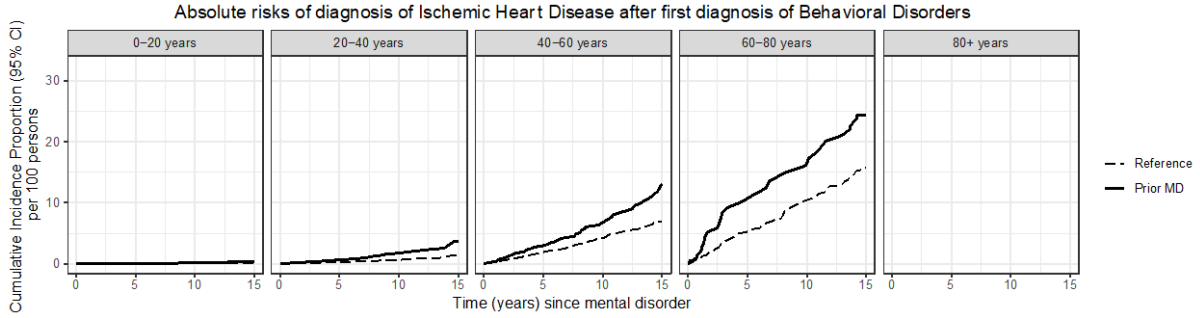


Figure S132.4 – Atrial Fibrillation

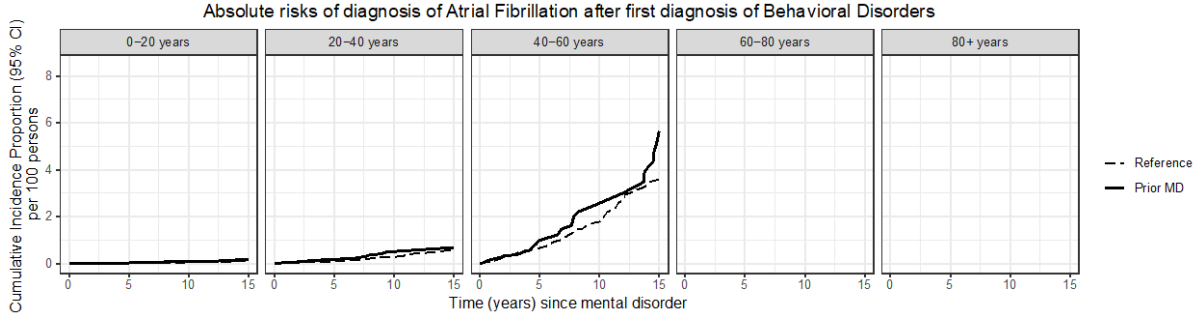


Figure S132.5 – Heart Failure

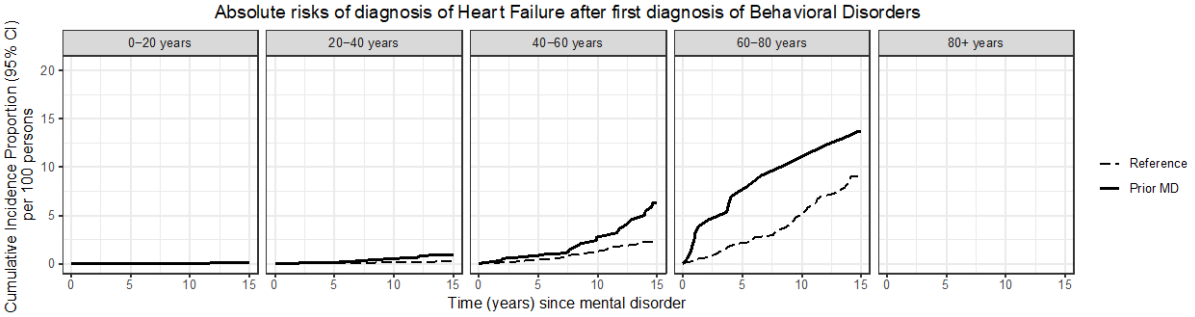


Figure S132.6 – Peripheral Artery Occlusive Disease

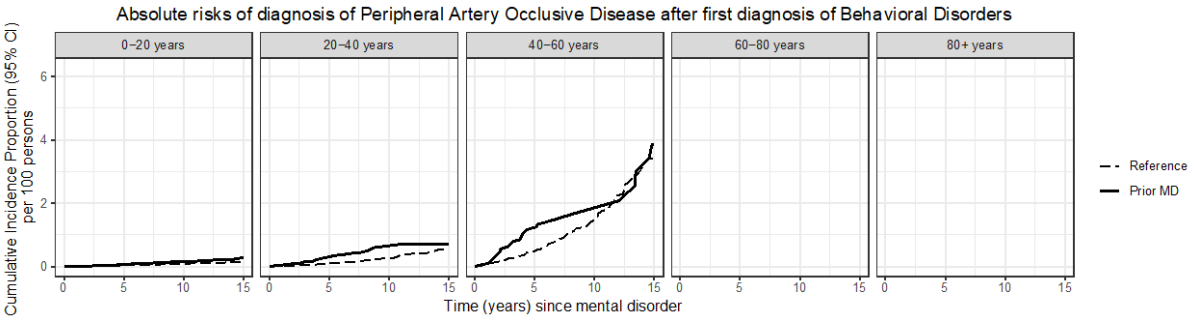


Figure S132.7 – Stroke

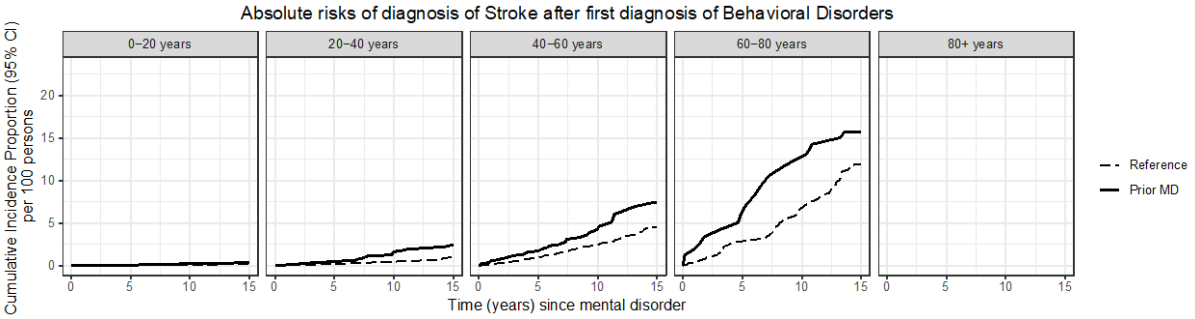


Figure S132.8 – Diabetes Mellitus

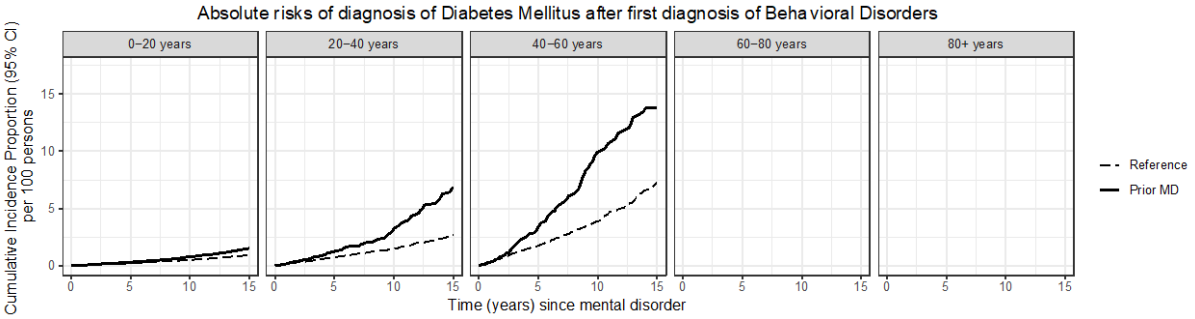


Figure S132.9 – Thyroid Disorders

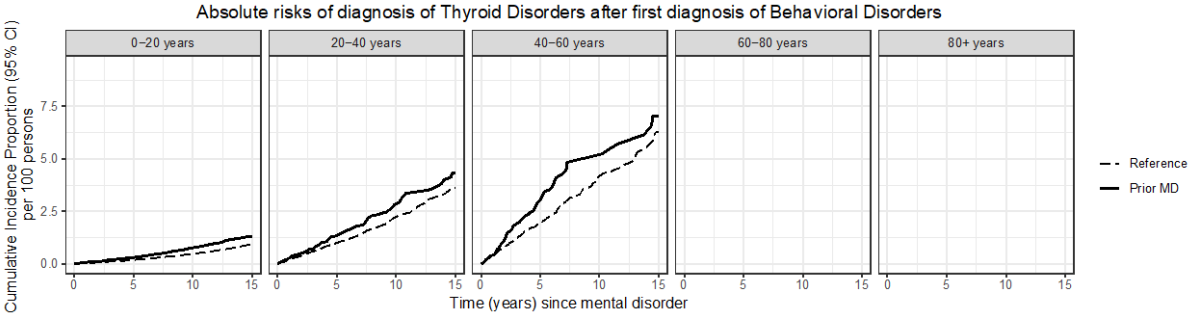


Figure S132.10 – Gout

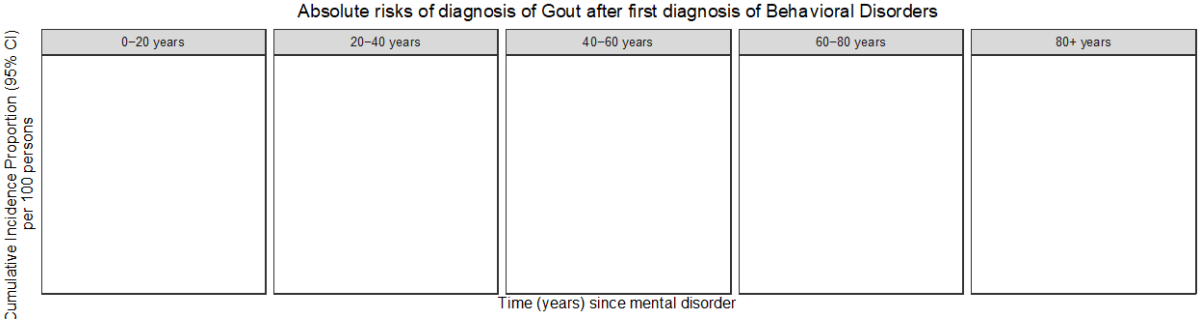


Figure S132.11 – Chronic Pulmonary Disease

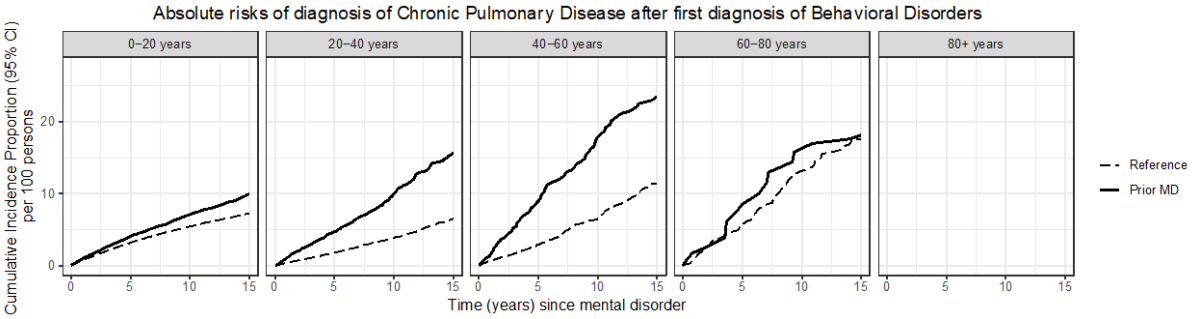


Figure S132.12 – Allergy

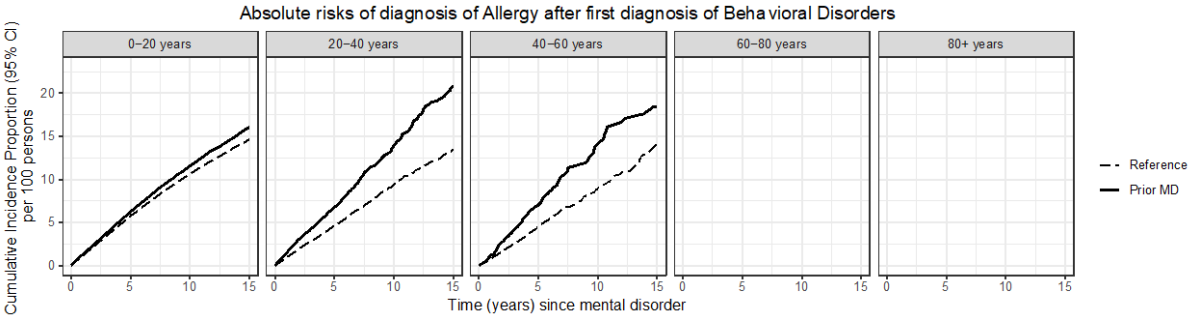


Figure S132.13 – Ulcer/Chronic Gastritis

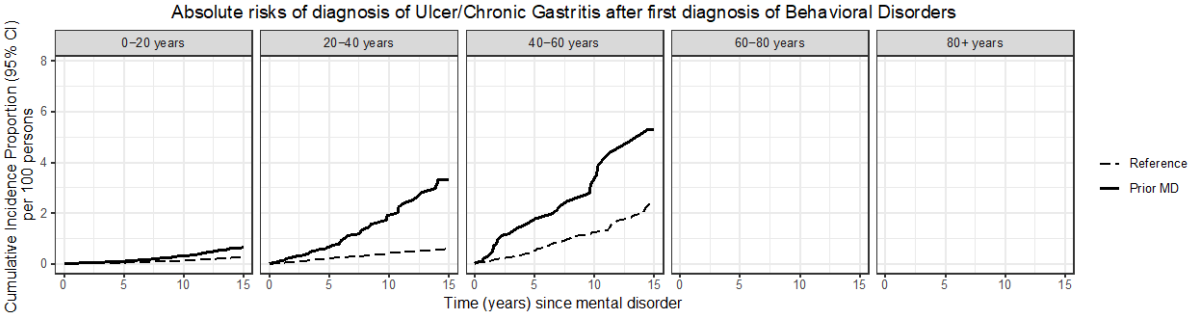


Figure S132.14 – Chronic Liver Disease

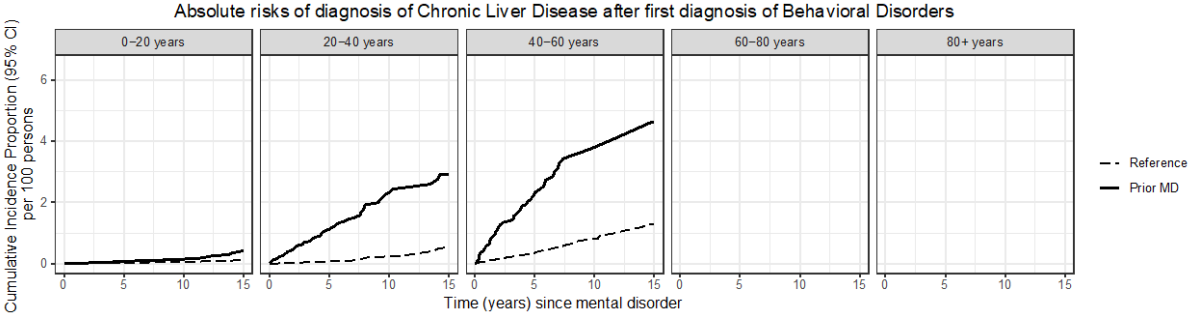


Figure S132.15 – Inflammatory Bowel Disease

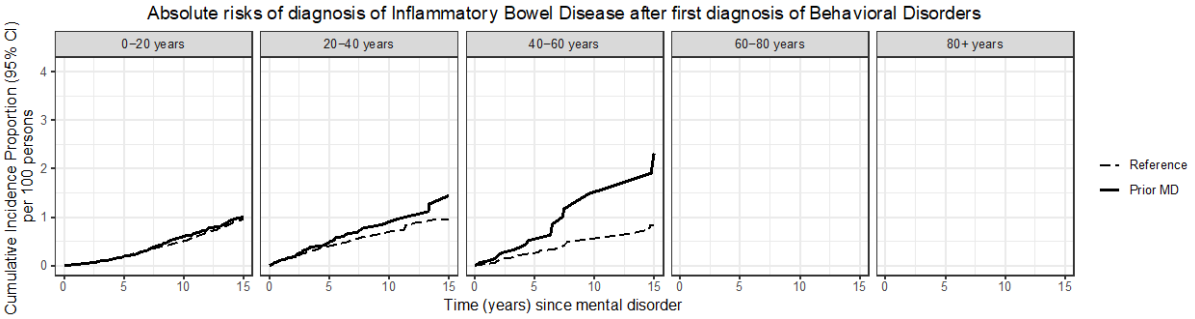


Figure S132.16 – Diverticular Disease of the Intestine

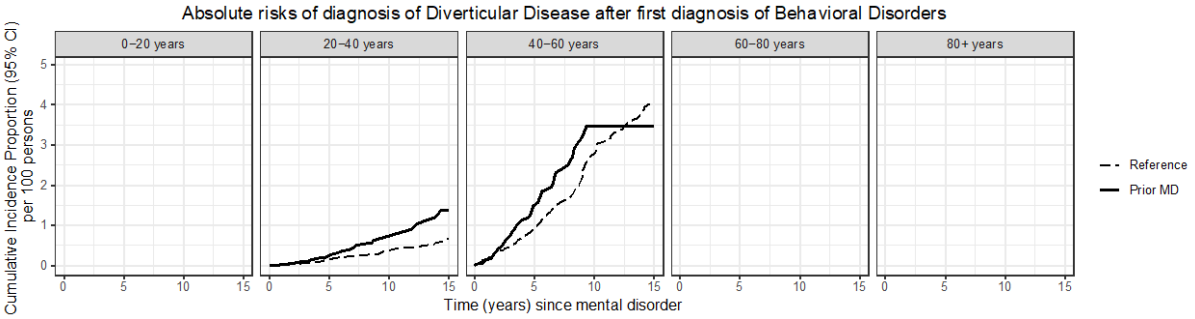


Figure S132.17 – Chronic Kidney Disease

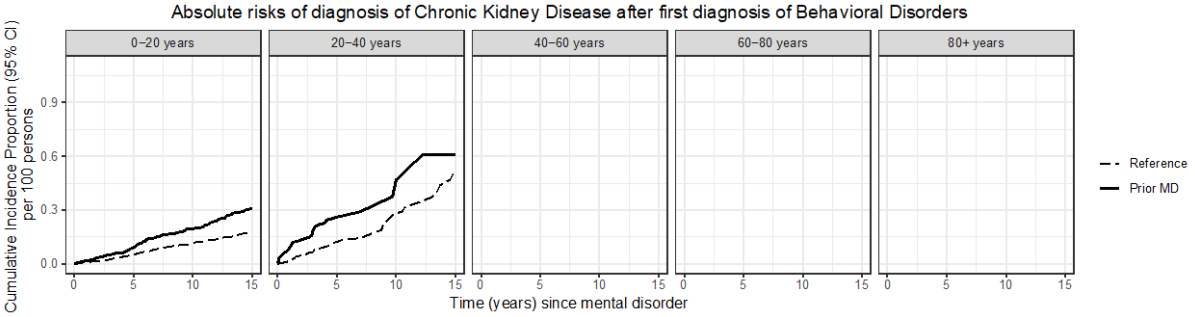


Figure S132.18 – Prostate Disorders

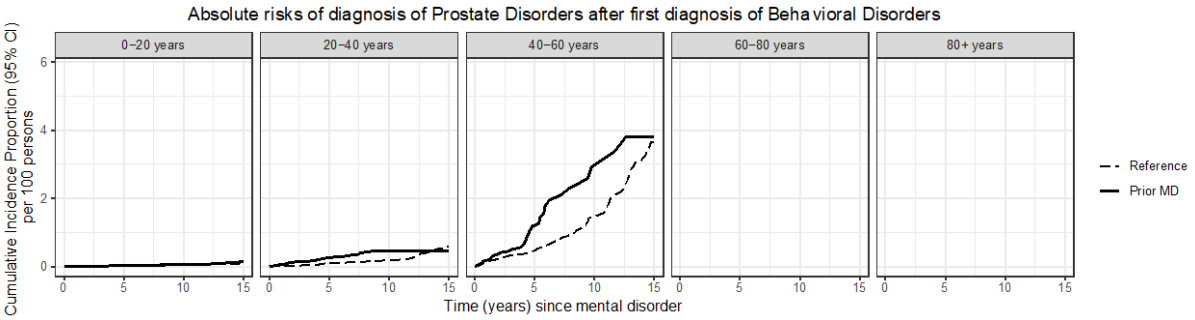


Figure S132.19 – Connective Tissue Disorders

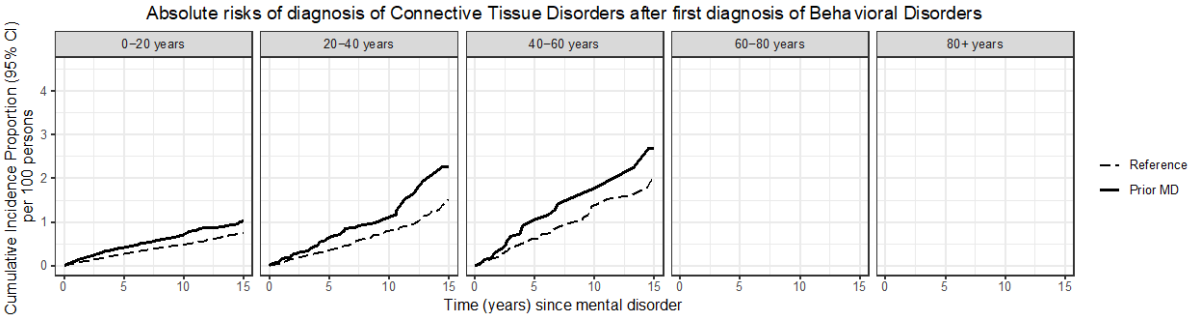


Figure S132.20 – Osteoporosis

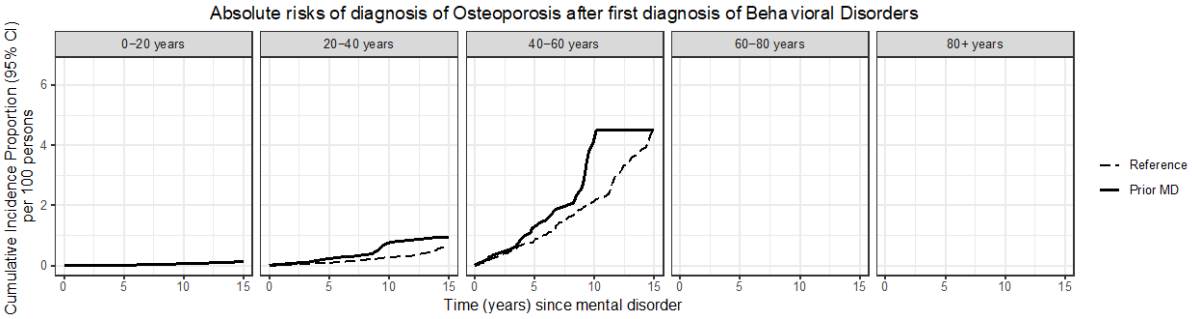


Figure S132.21 – Painful Conditions

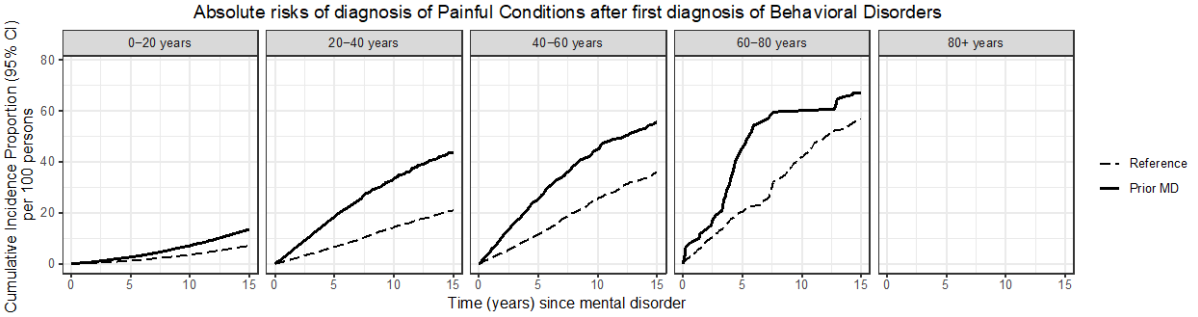


Figure S132.22 – HIV/AIDS

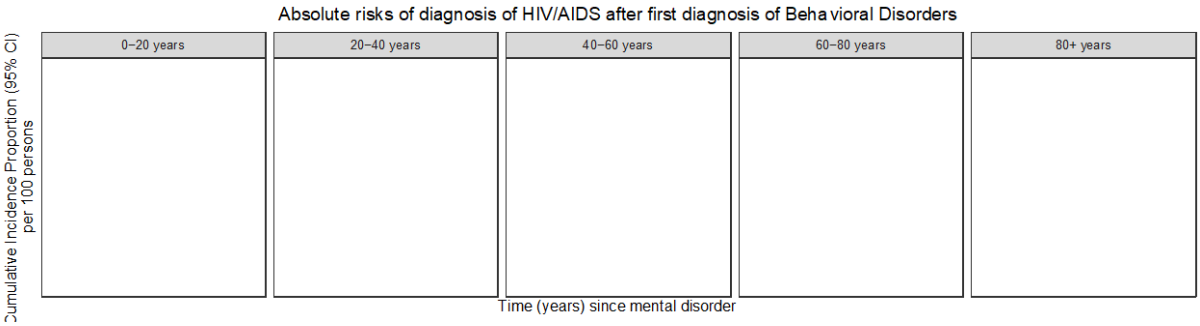


Figure S132.23 – Anemias

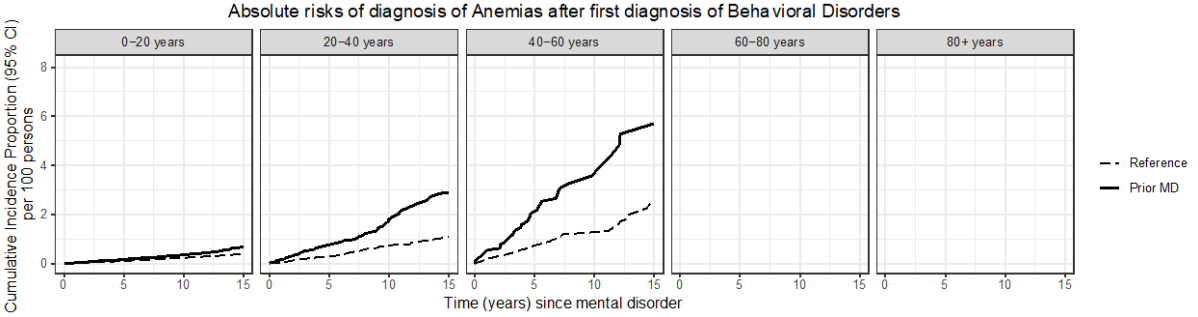


Figure S132.24 – Cancer

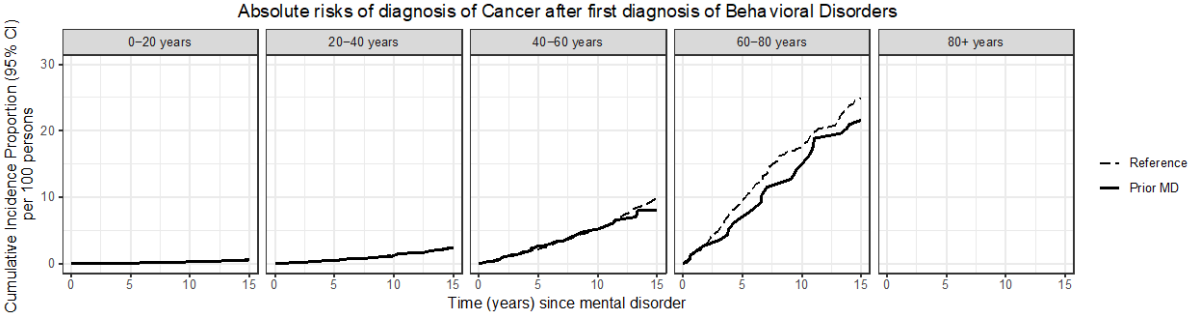


Figure S132.25 – Vision Problems

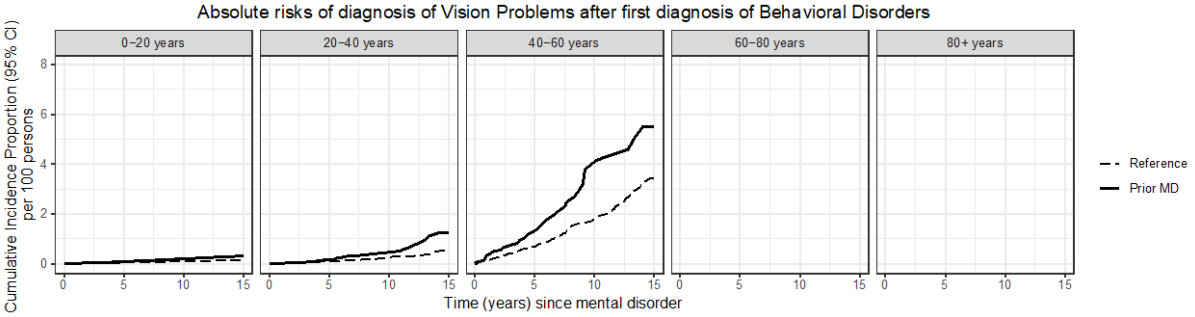


Figure S132.26 – Hearing Problems

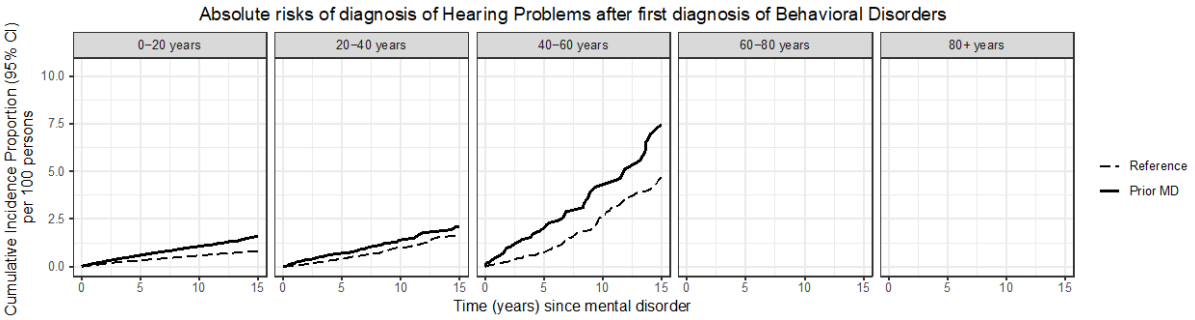


Figure S132.27 – Migraine

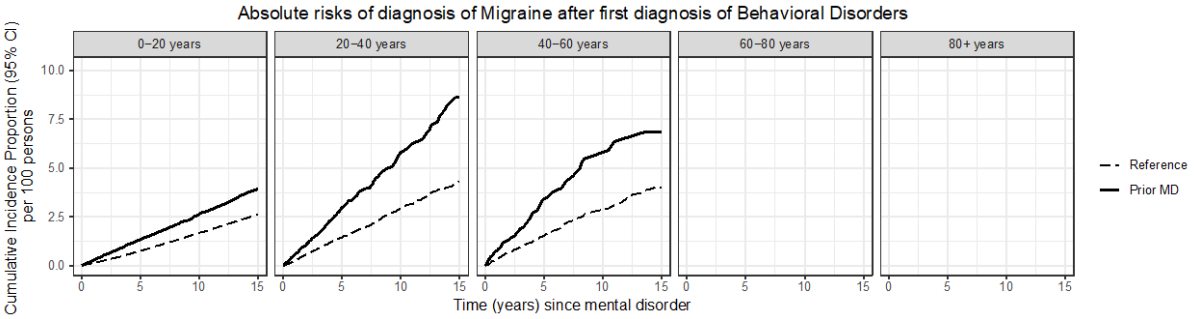


Figure S132.28 – Epilepsy

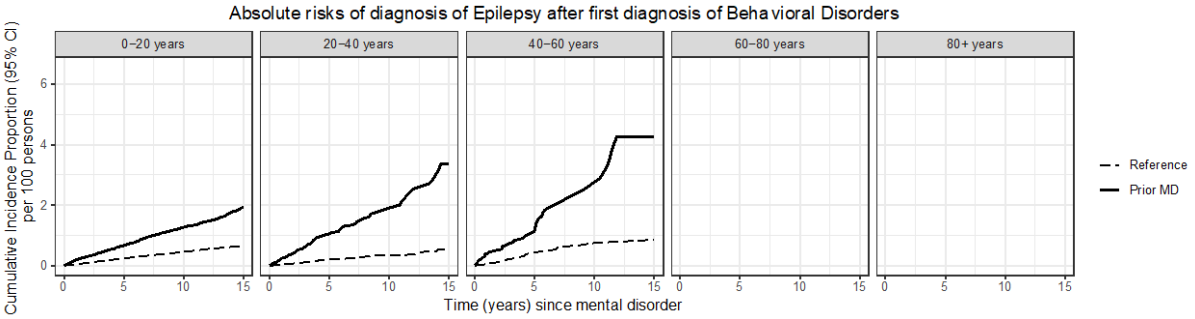


Figure S132.29 – Parkinson's Disease

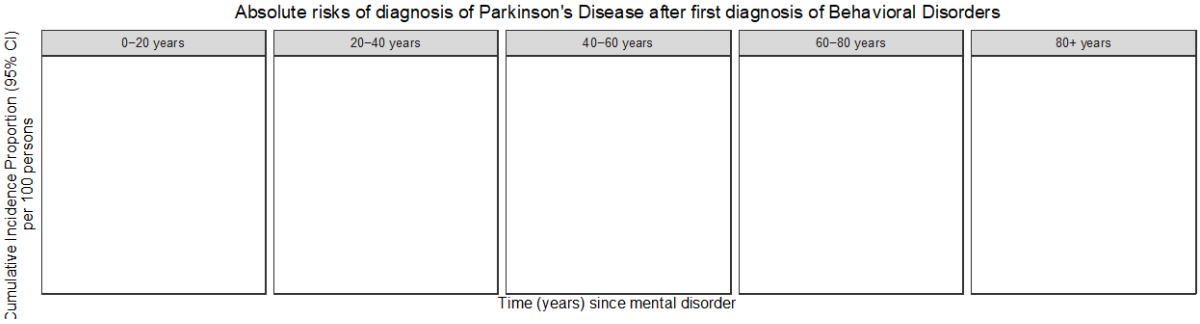


Figure S132.30 – Multiple Sclerosis

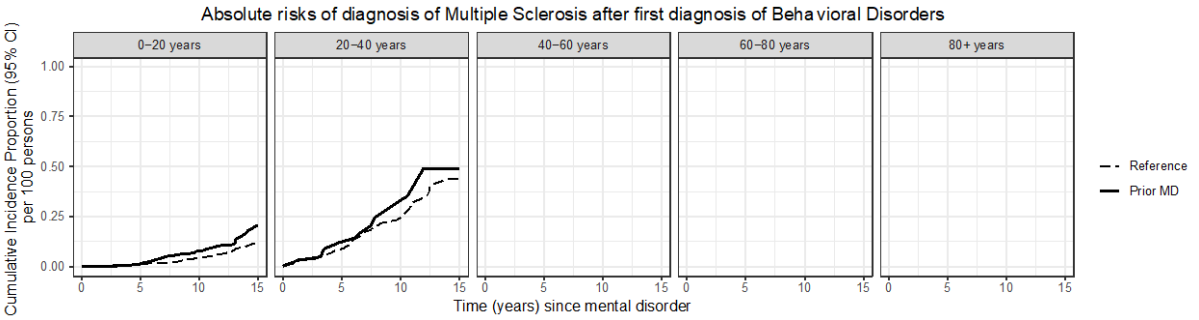
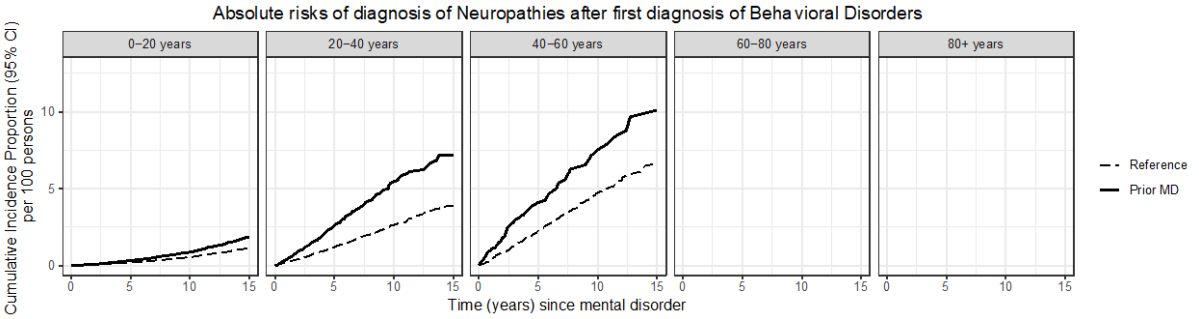


Figure S132.31 – Neuropathies



Figures S133.1-S133.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Organic Disorders

Figure S133.1 – Hypertension

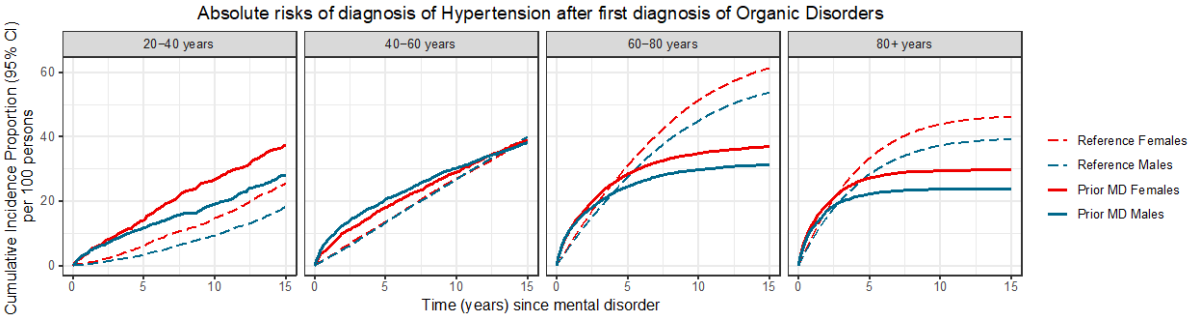


Figure S133.2 – Dyslipidemia

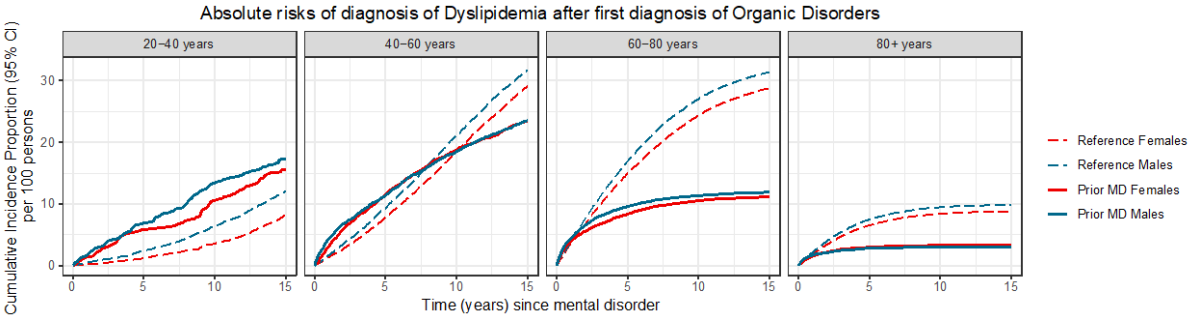


Figure S133.3 – Ischemic Heart Disease

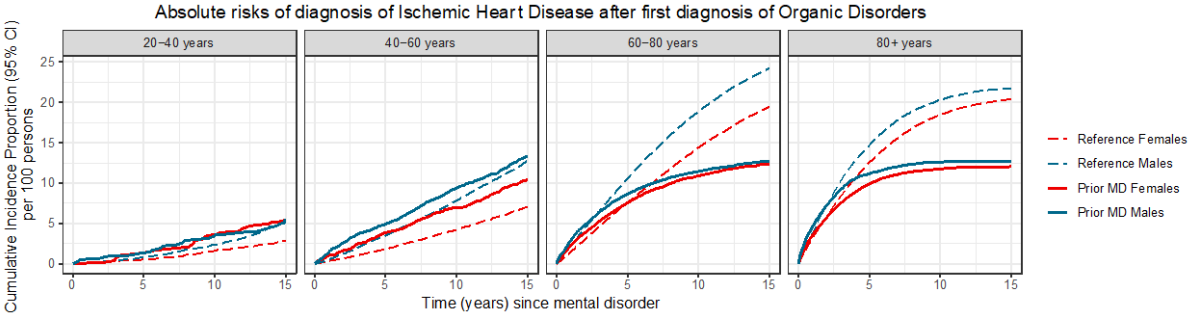


Figure S133.4 – Atrial Fibrillation

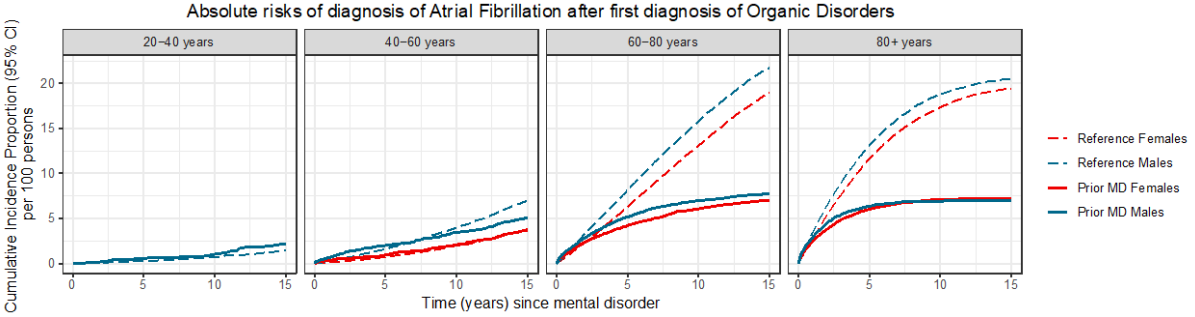


Figure S133.5 –Heart Failure

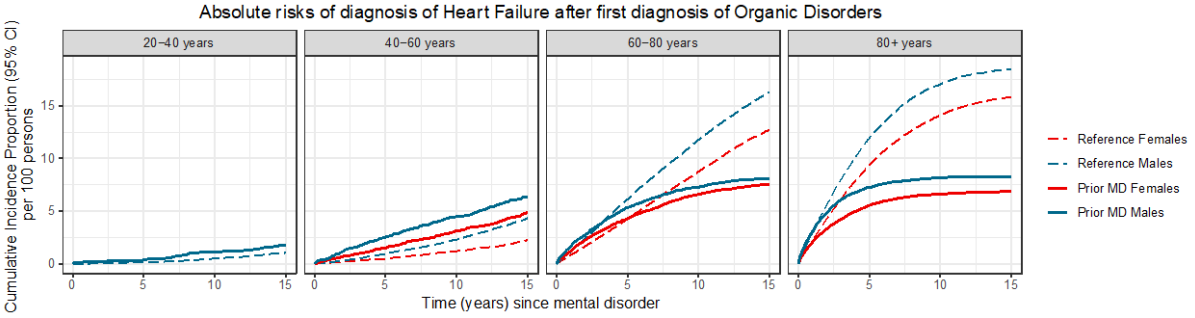


Figure S133.6 – Peripheral Artery Occlusive Disease

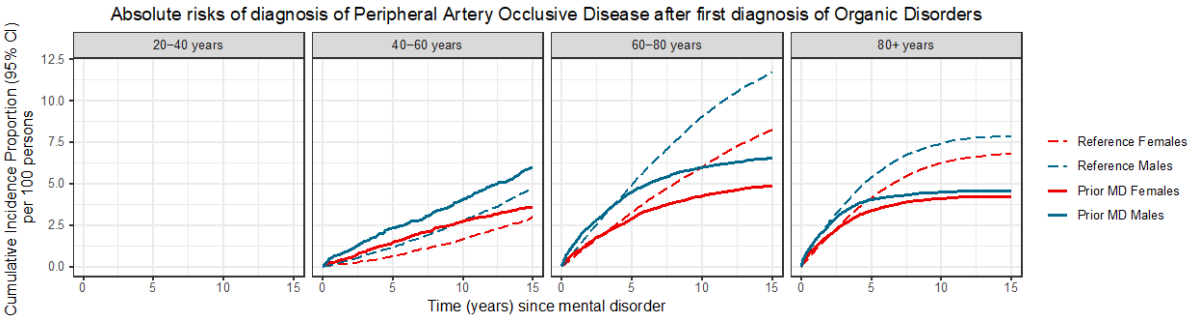


Figure S133.7 – Stroke

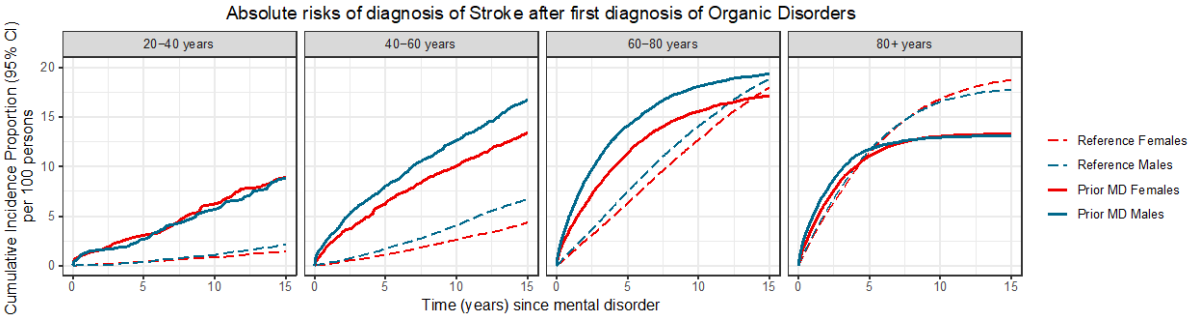


Figure S133.8 – Diabetes Mellitus

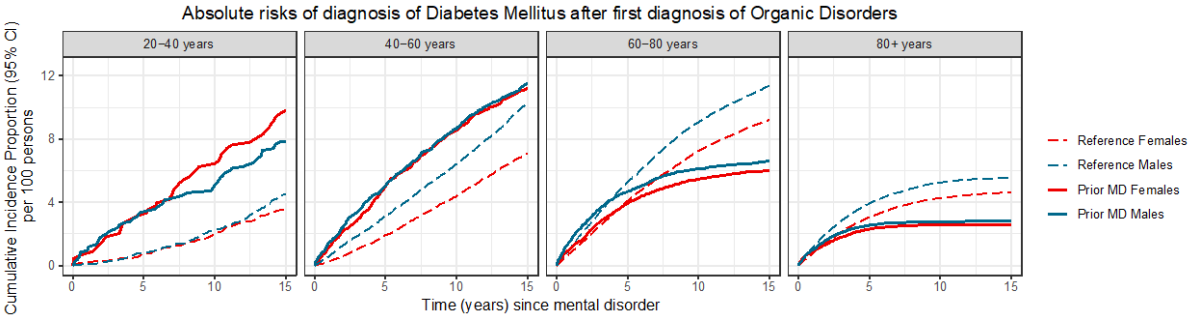


Figure S133.9 – Thyroid Disorders

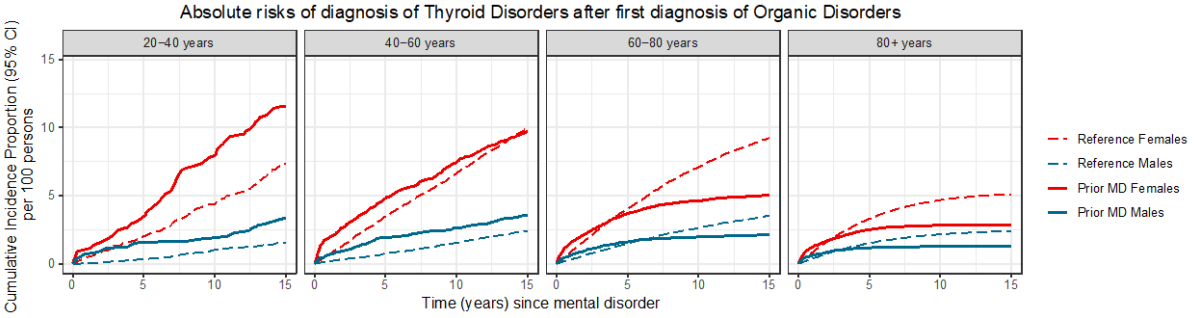


Figure S133.10 – Gout

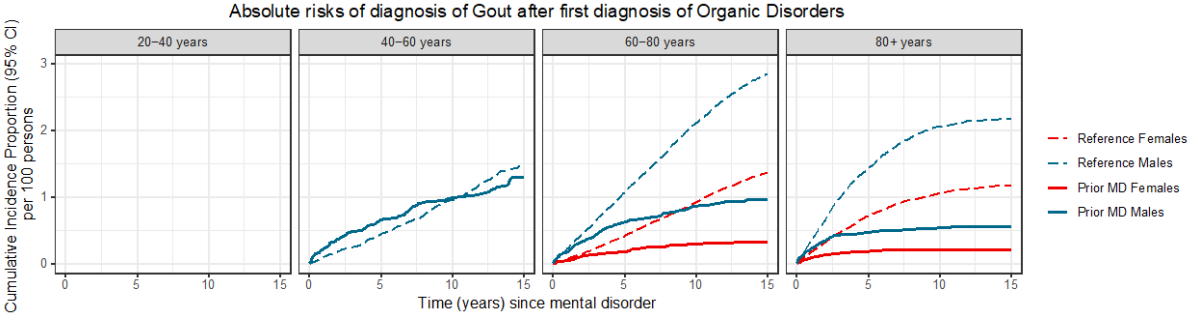


Figure S133.11 – Chronic Pulmonary Disease

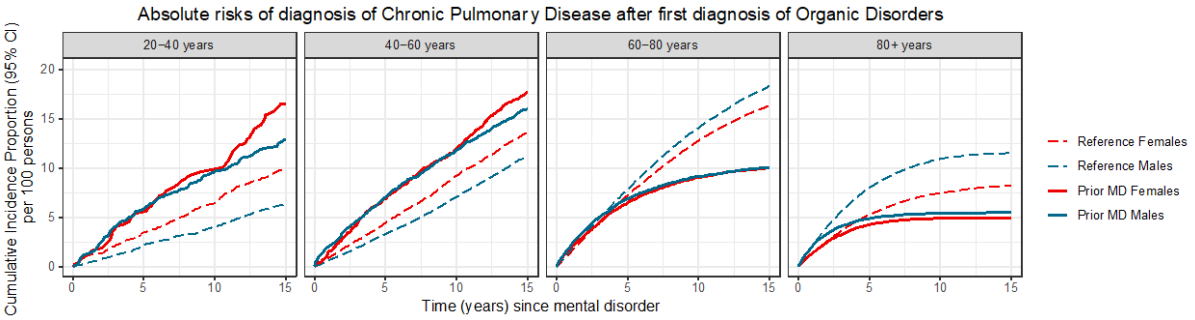


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Figure S133.12 – Allergy

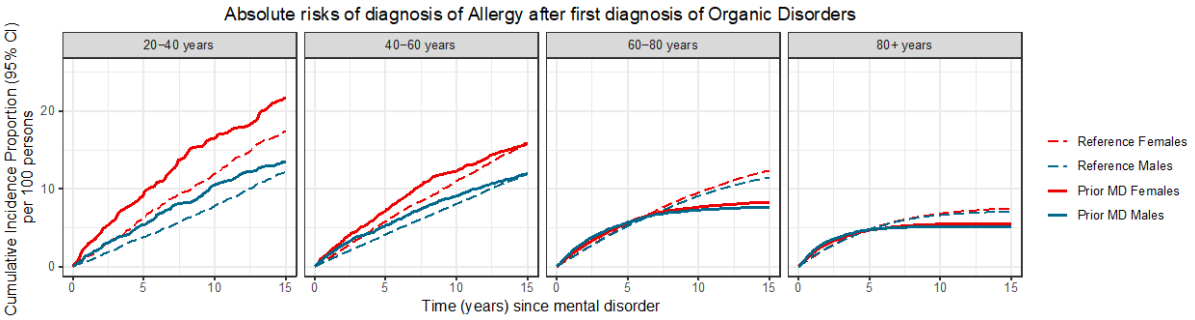


Figure S133.13 – Ulcer/Chronic Gastritis

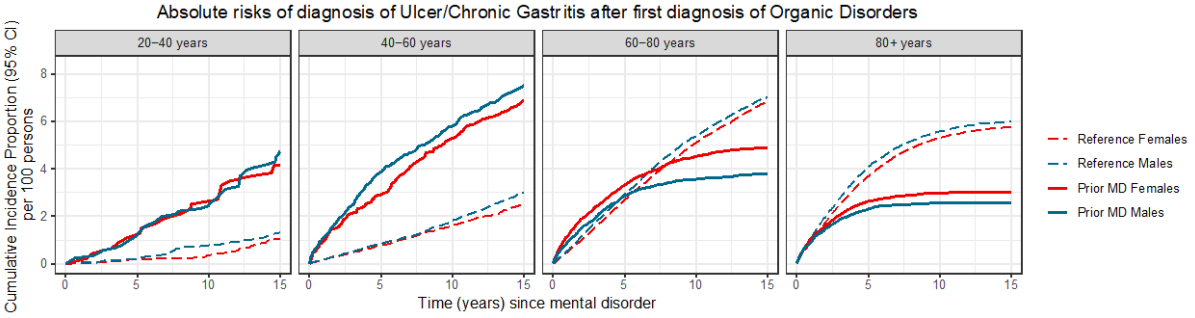


Figure S133.14 – Chronic Liver Disease

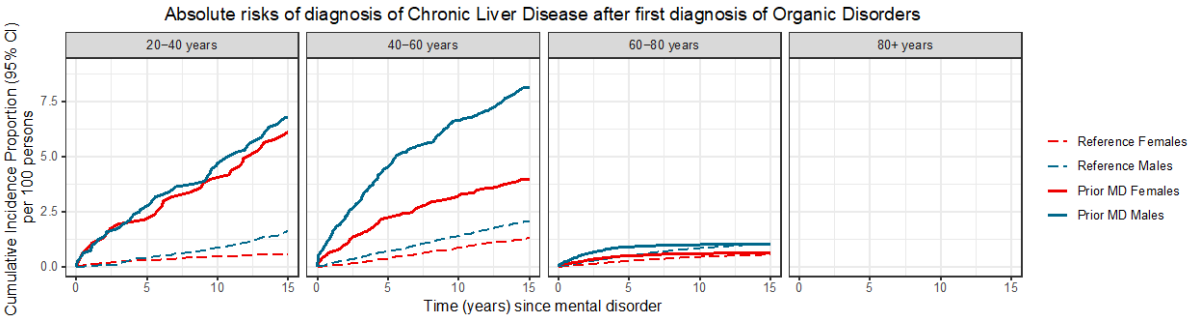


Figure S133.15 – Inflammatory Bowel Disease

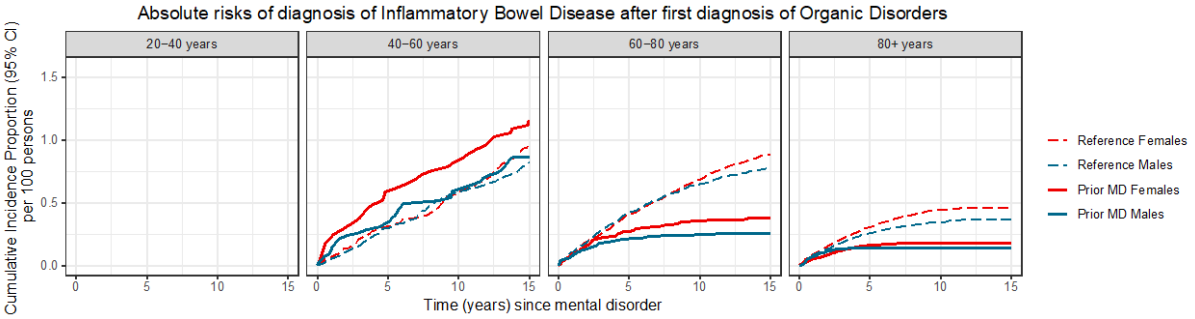


Figure S133.16 – Diverticular Disease of the Intestine

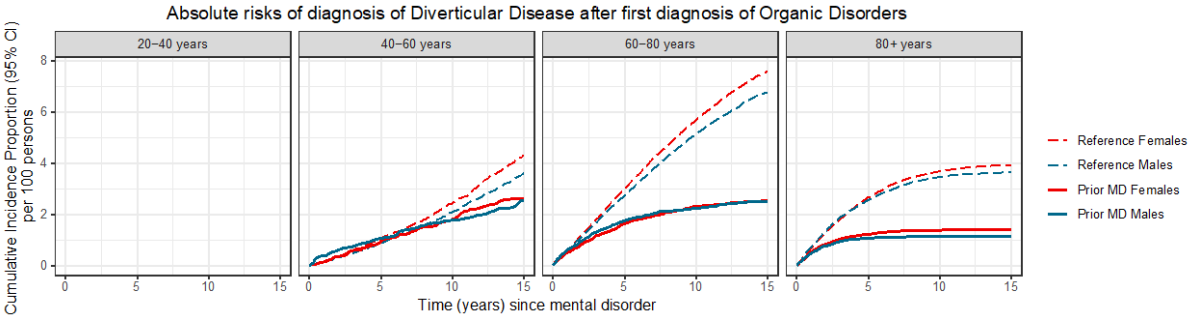


Figure S133.17 – Chronic Kidney Disease

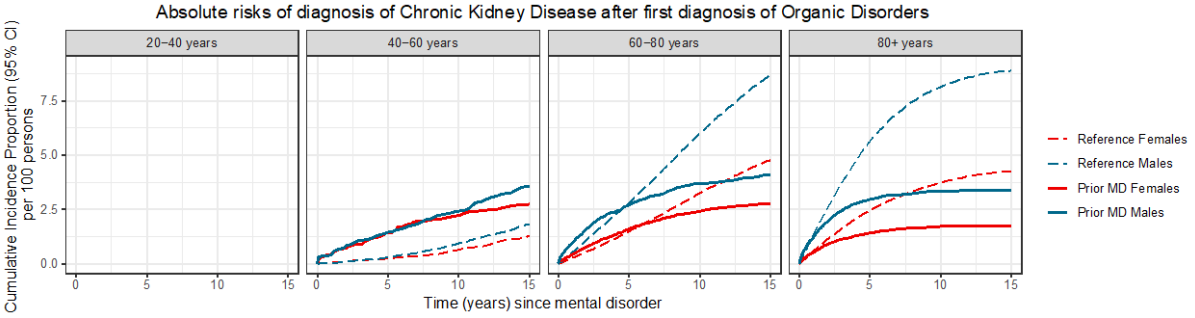


Figure S133.18 – Prostate Disorders

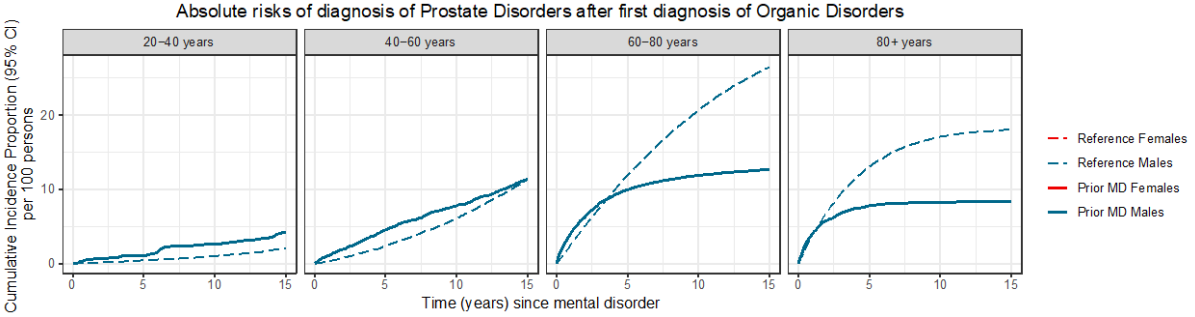


Figure S133.19 – Connective Tissue Disorders

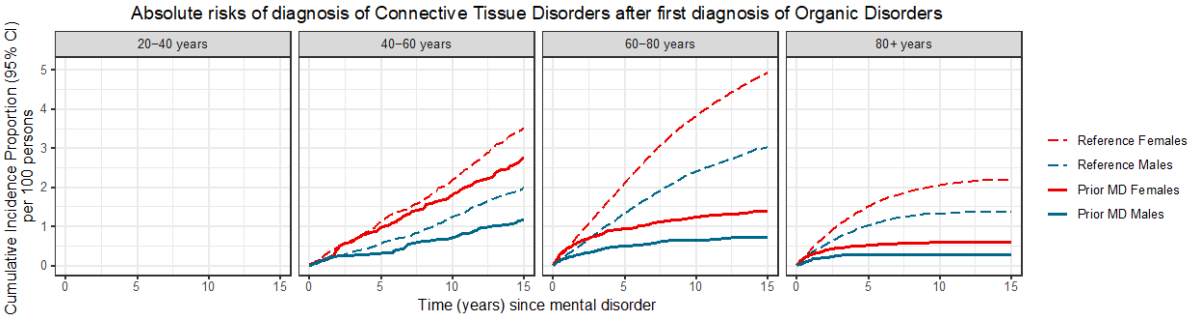


Figure S133.20 – Osteoporosis

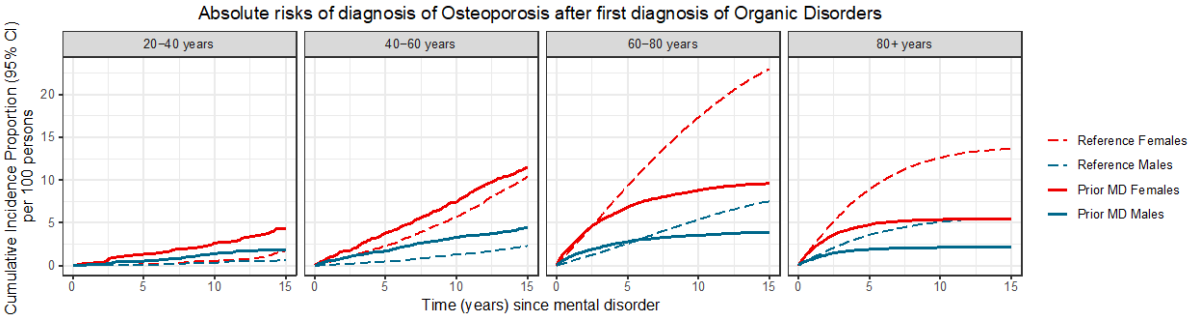


Figure S133.21 – Painful Conditions

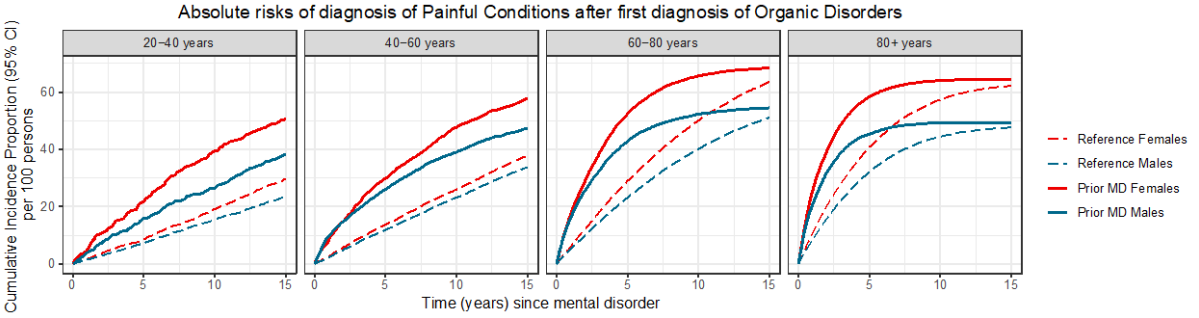


Figure S133.22 – HIV/AIDS

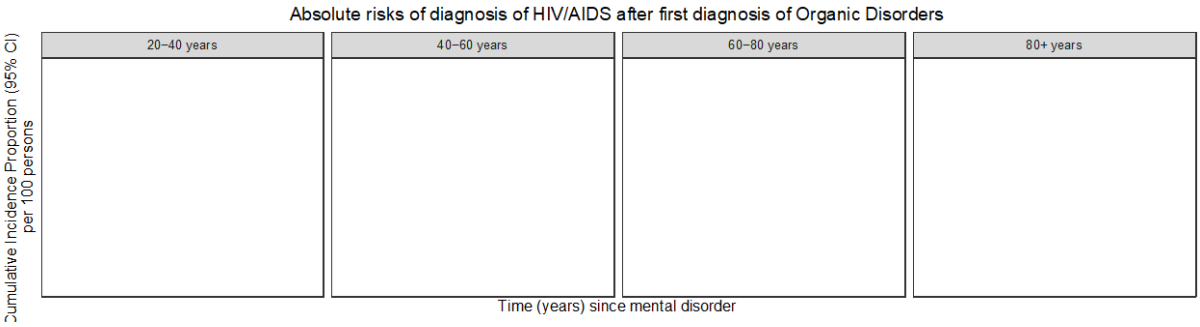


Figure S133.23 – Anemias

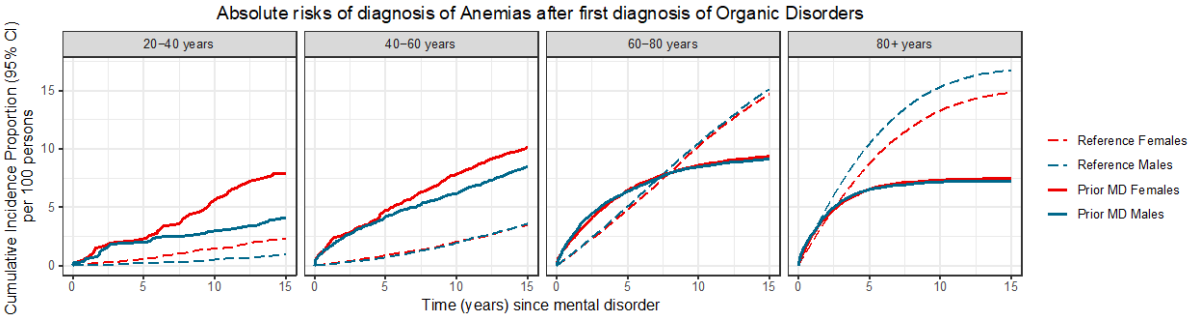


Figure S133.24 – Cancer

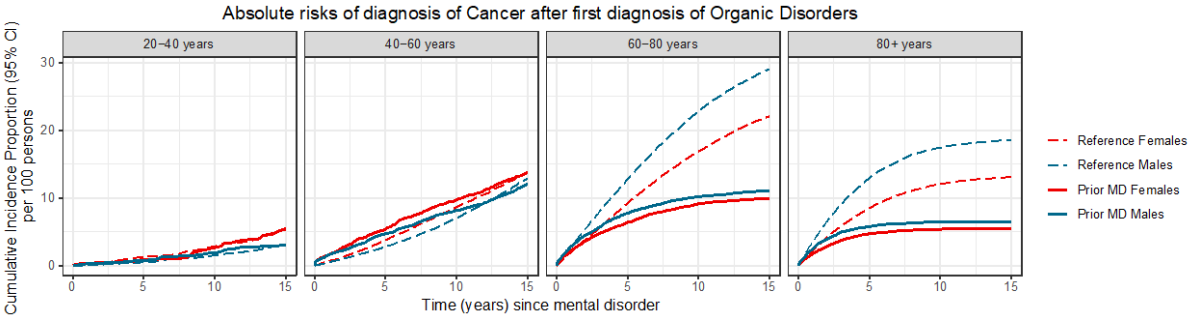


Figure S133.25 – Vision Problems

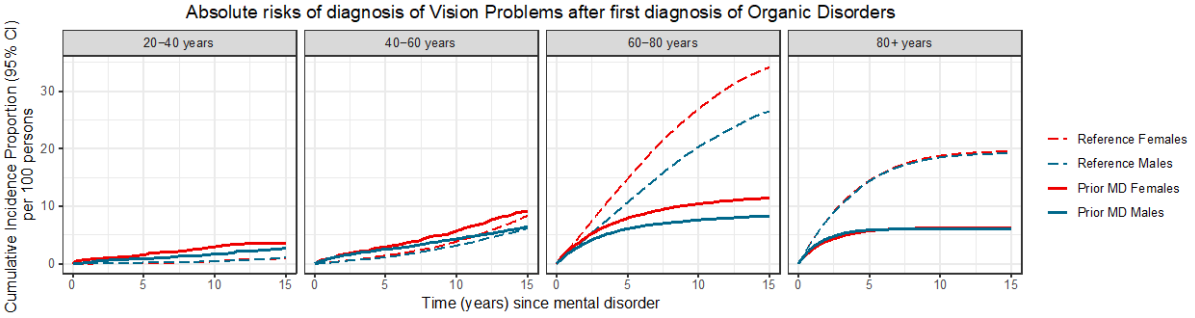


Figure S133.26 – Hearing Problems

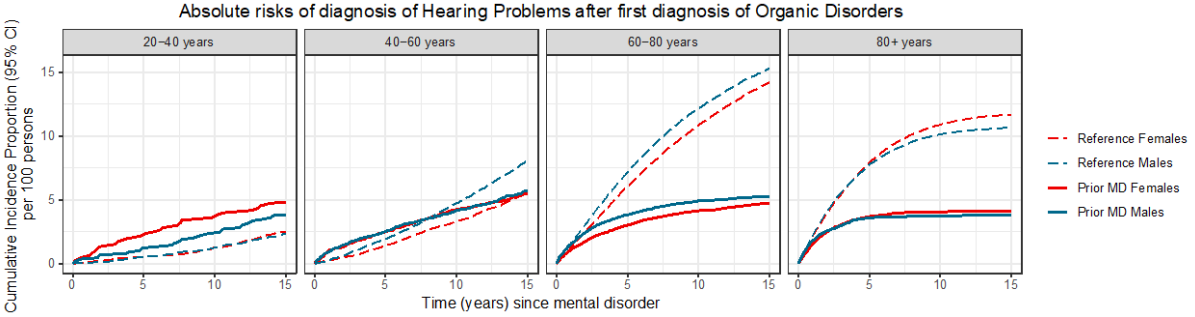


Figure S133.27 – Migraine

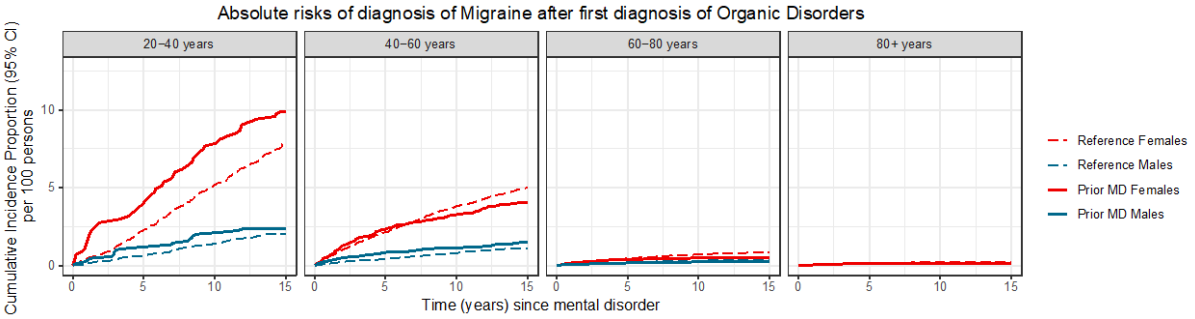


Figure S133.28 – Epilepsy

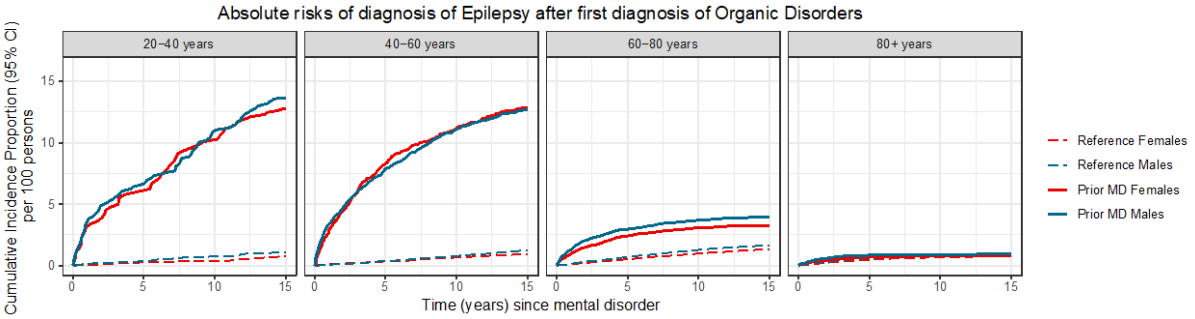


Figure S133.29 – Parkinson's Disease

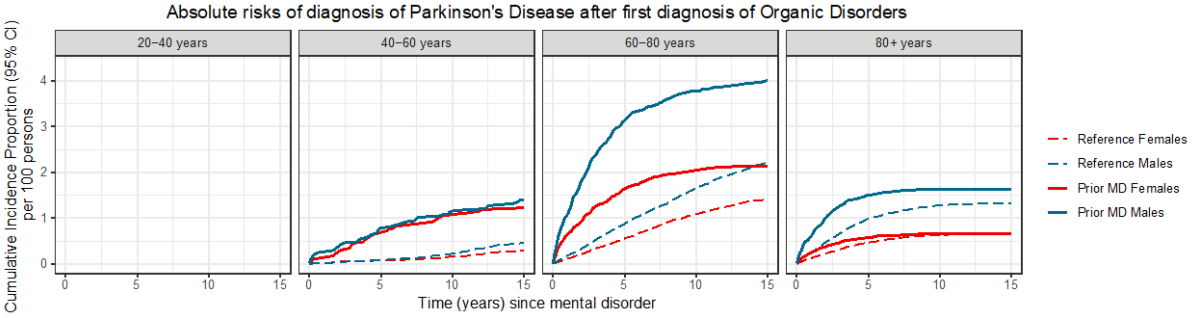


Figure S133.30 – Multiple Sclerosis

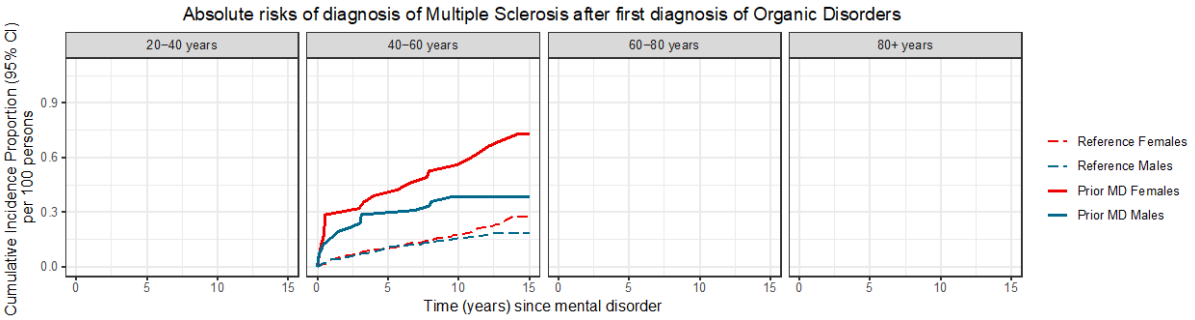
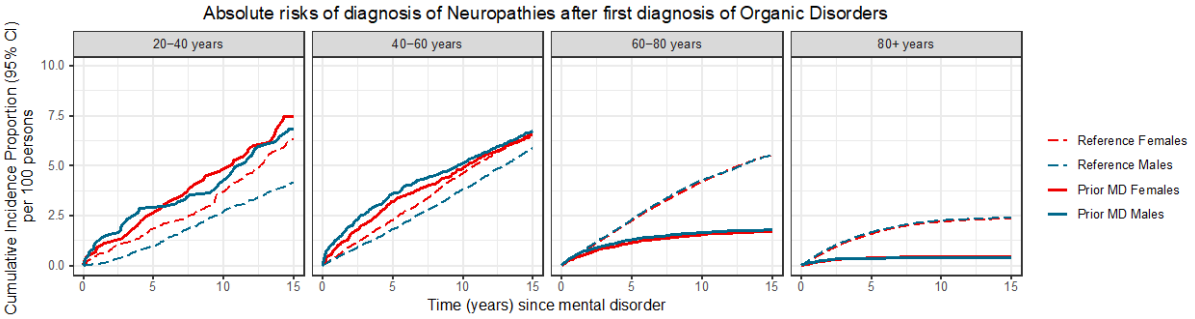


Figure S133.31 – Neuropathies



Figures S134.1-S134.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Substance Use Disorders.

Figure S134.1 - Hypertension

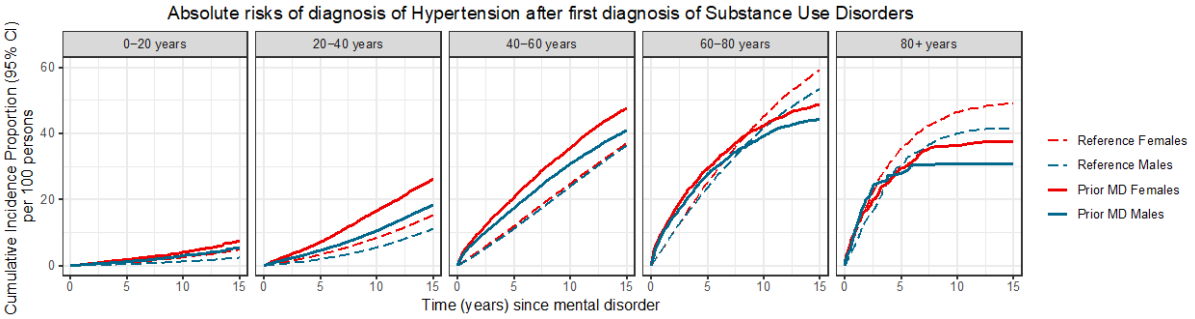


Figure S134.2 – Dyslipidemia

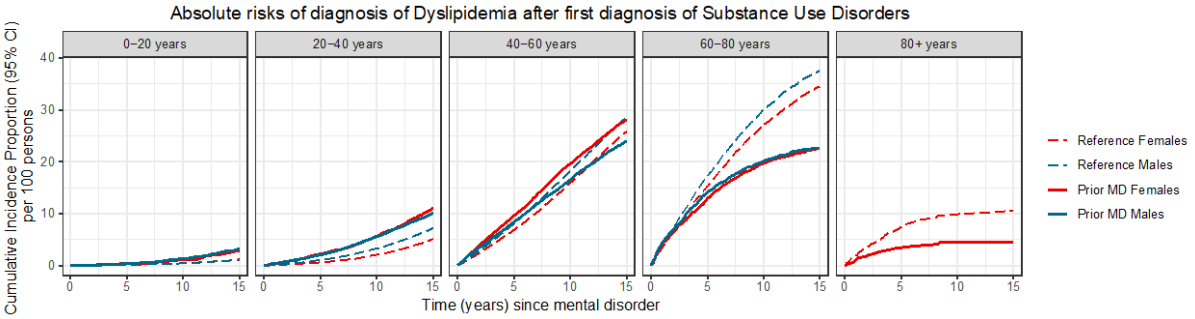


Figure S134.3 – Ischemic Heart Disease

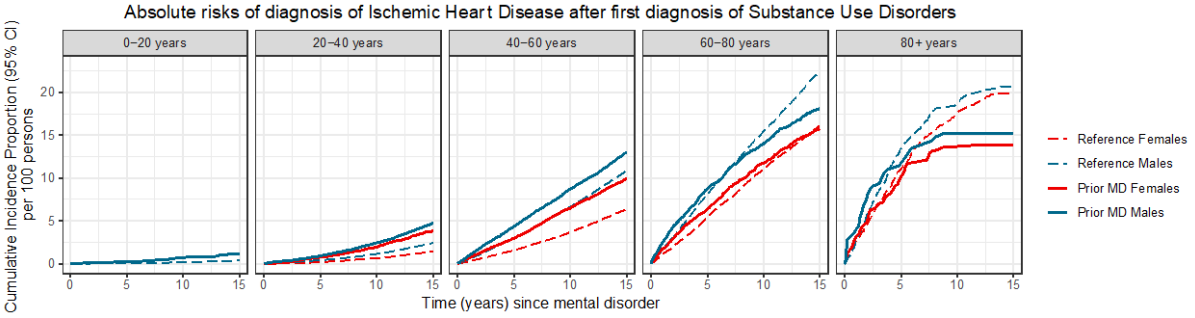


Figure S134.4 – Atrial Fibrillation

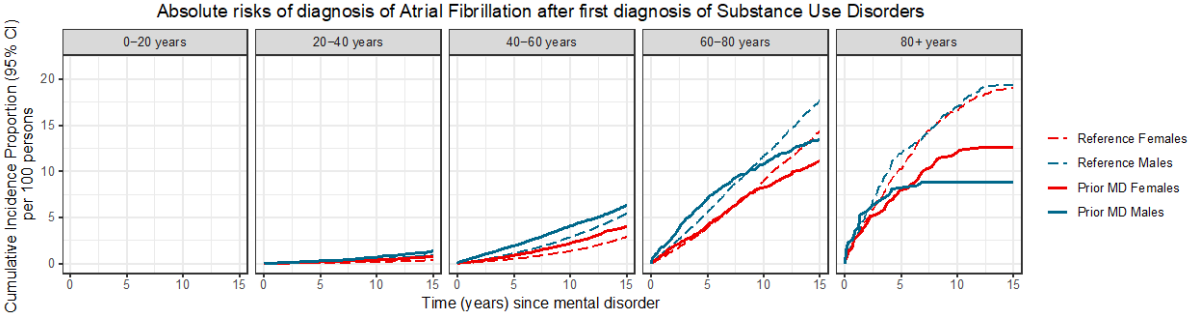


Figure S134.5 – Heart Failure

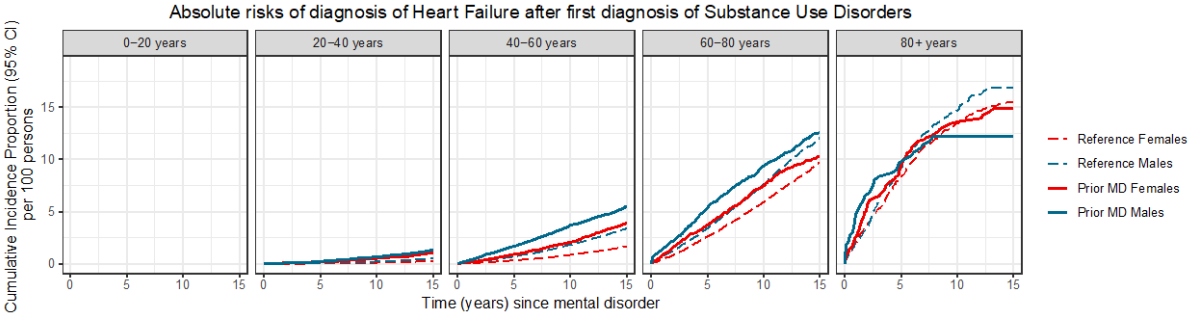


Figure S134.6 – Peripheral Artery Occlusive Disease

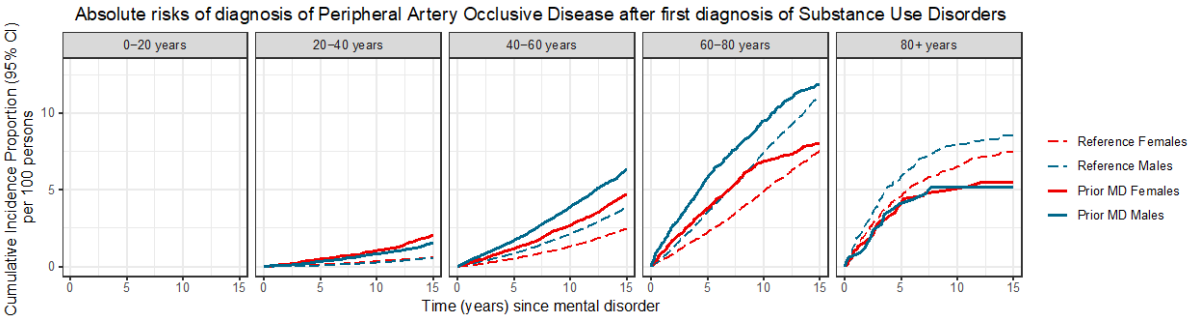


Figure S134.7 – Stroke

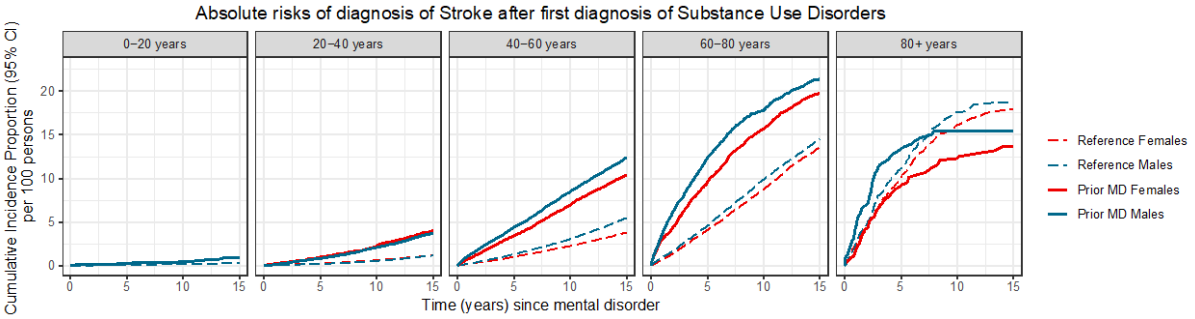


Figure S134.8 – Diabetes Mellitus

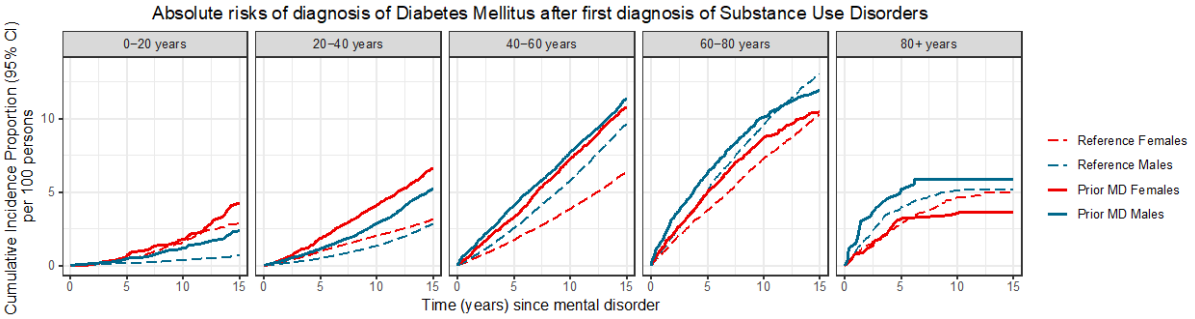


Figure S134.9 – Thyroid Disorders

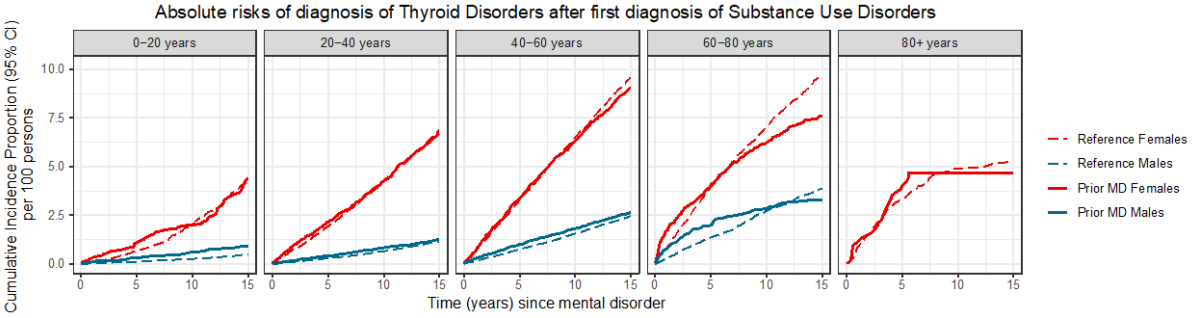


Figure S134.10 – Gout

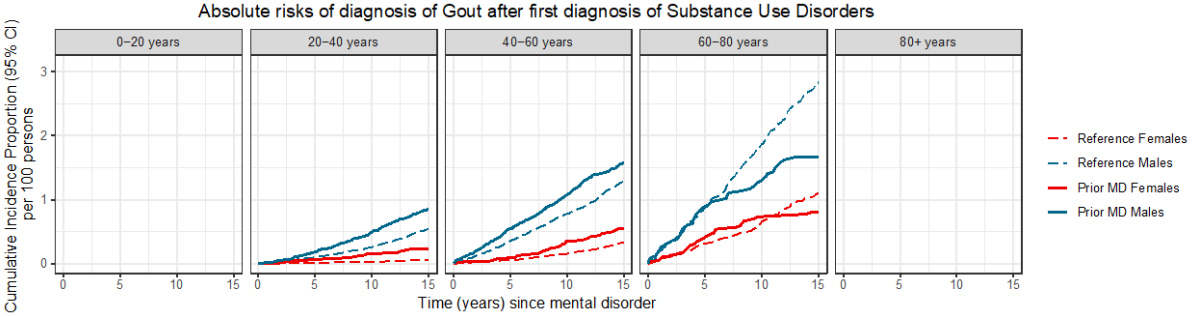


Figure S134.11 – Chronic Pulmonary Disease

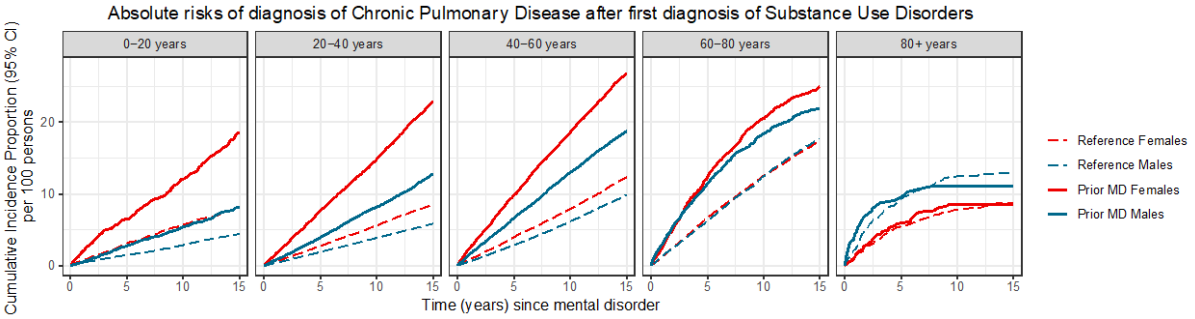


Figure S134.12 – Allergy

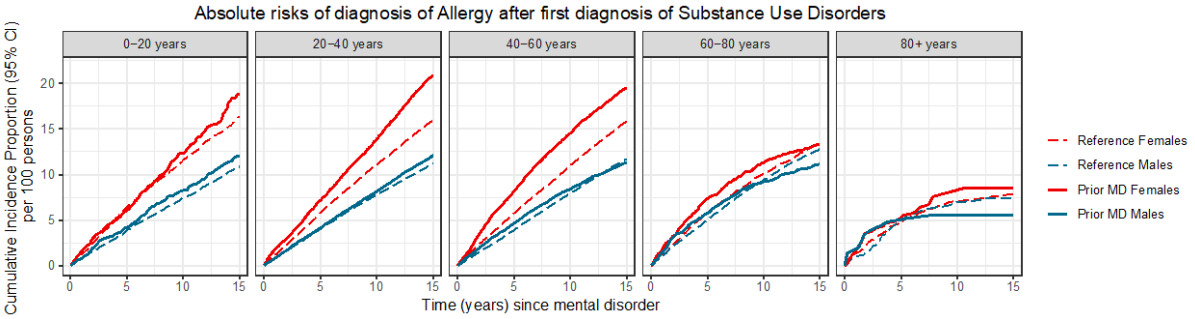


Figure S134.13 – Ulcer/Chronic Gastritis

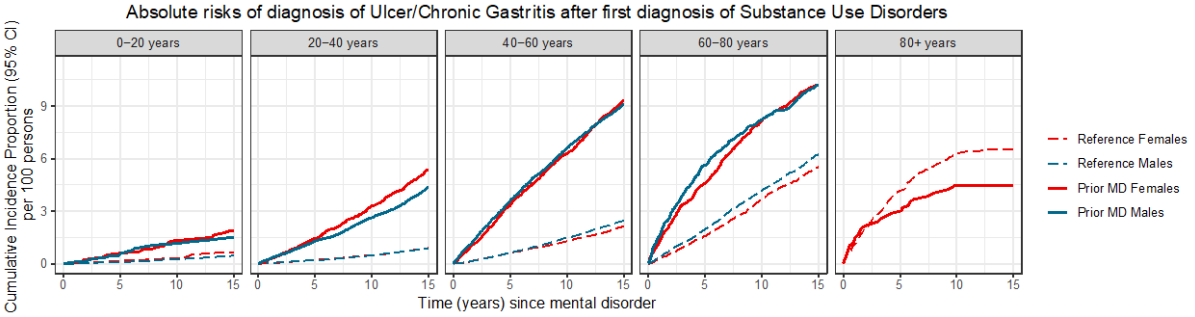


Figure S134.14 – Chronic Liver Disease

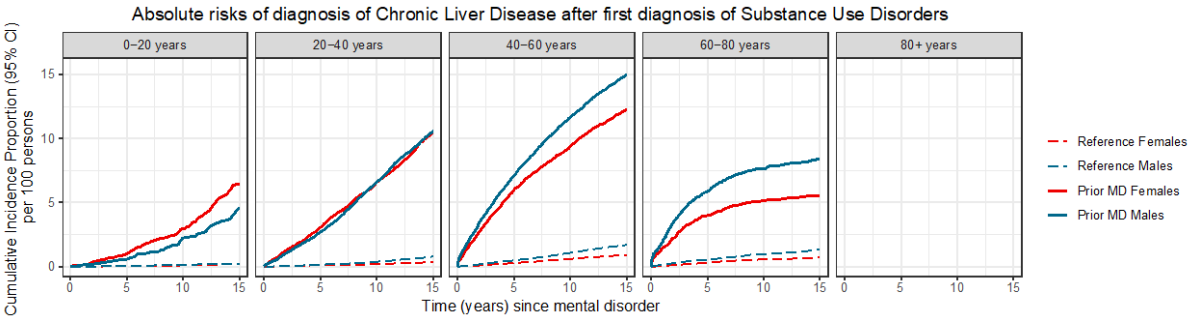


Figure S134.15 – Inflammatory Bowel Disease

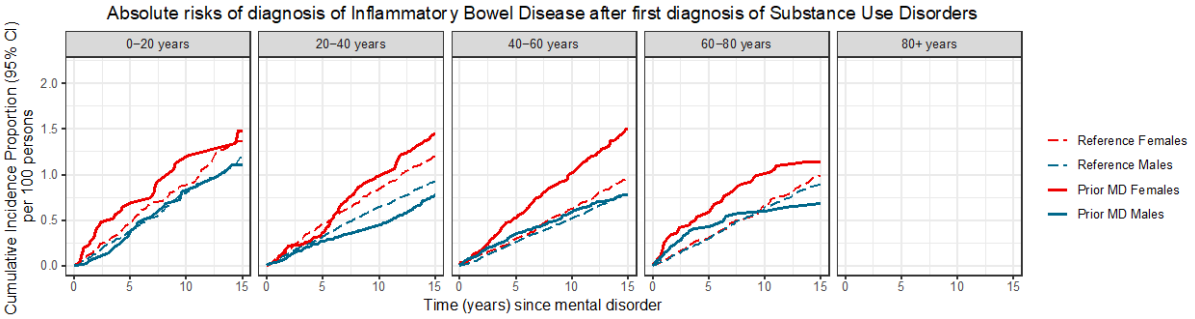


Figure S134.16 – Diverticular Disease of the Intestine

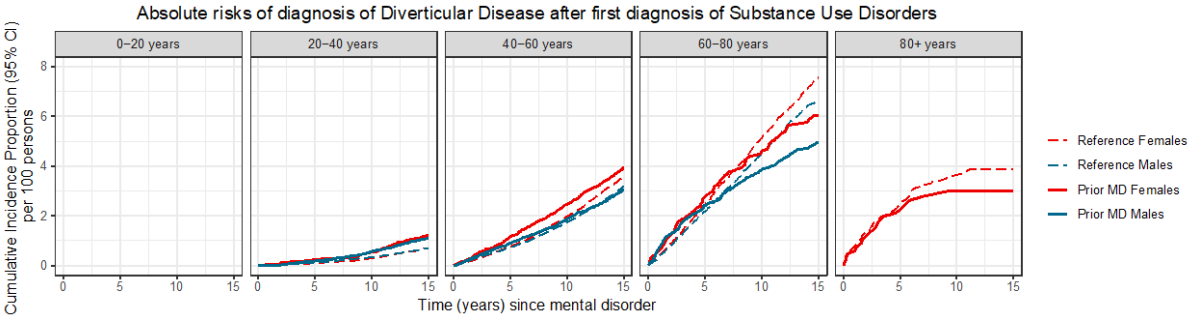


Figure S134.17 – Chronic Kidney Disease

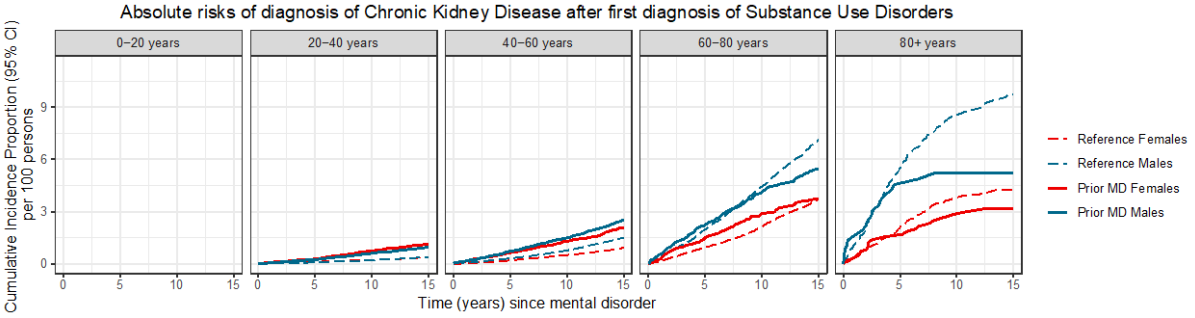


Figure S134.18 – Prostate Disorders

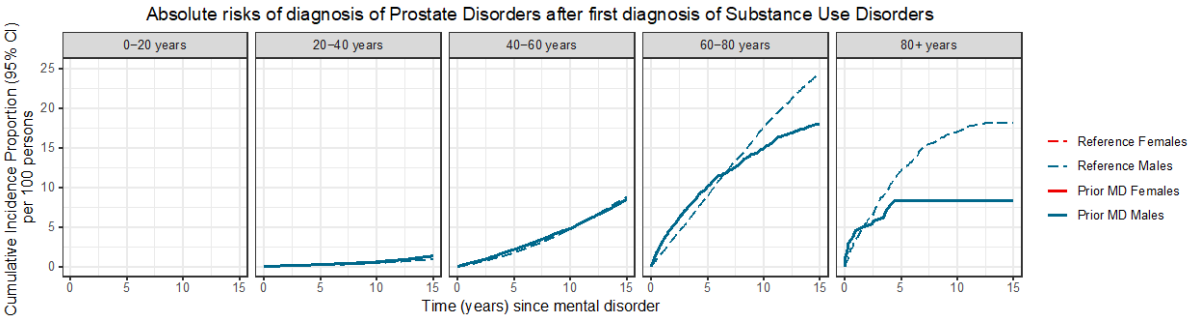


Figure S134.19 – Connective Tissue Disorders

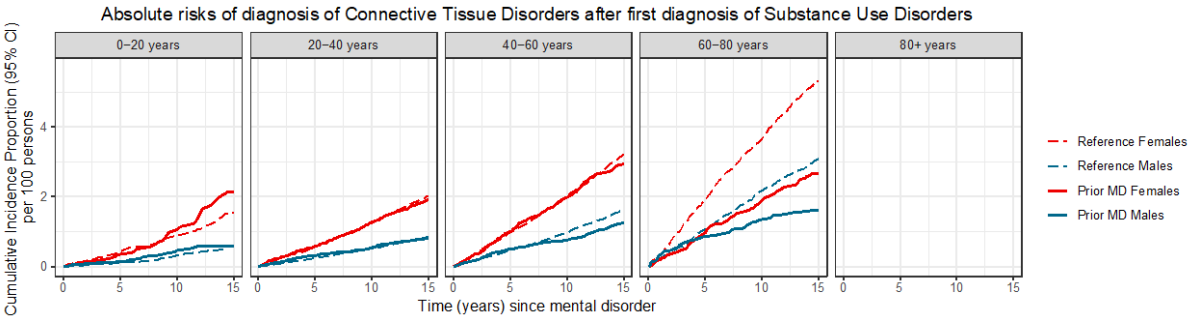


Figure S134.20 – Osteoporosis

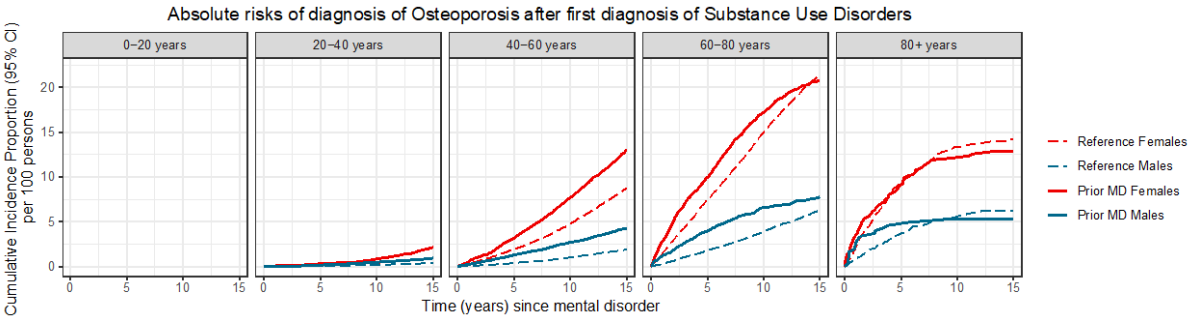


Figure S134.21 – Painful Conditions

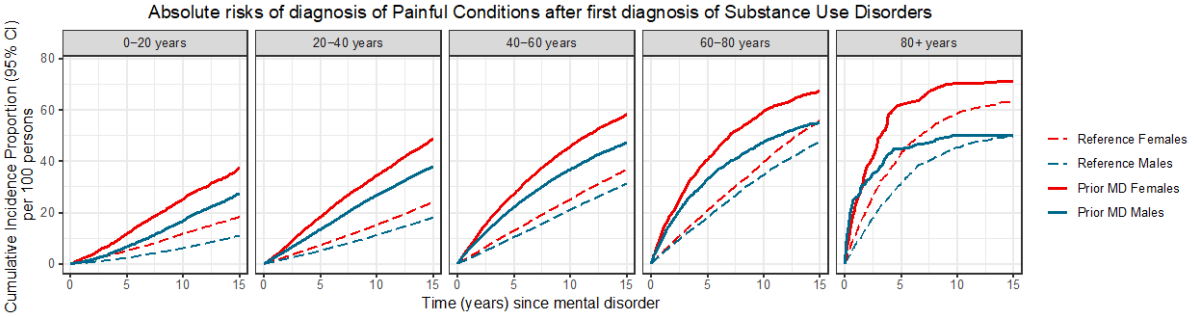


Figure S134.22 – HIV/AIDS

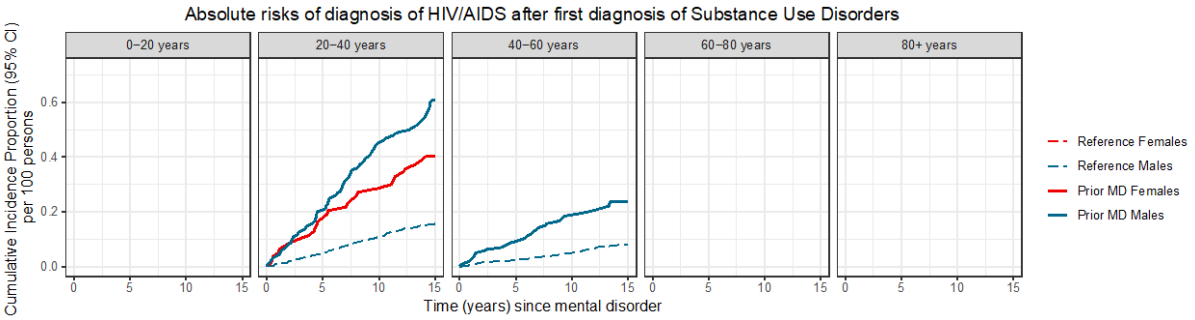


Figure S134.23 – Anemias

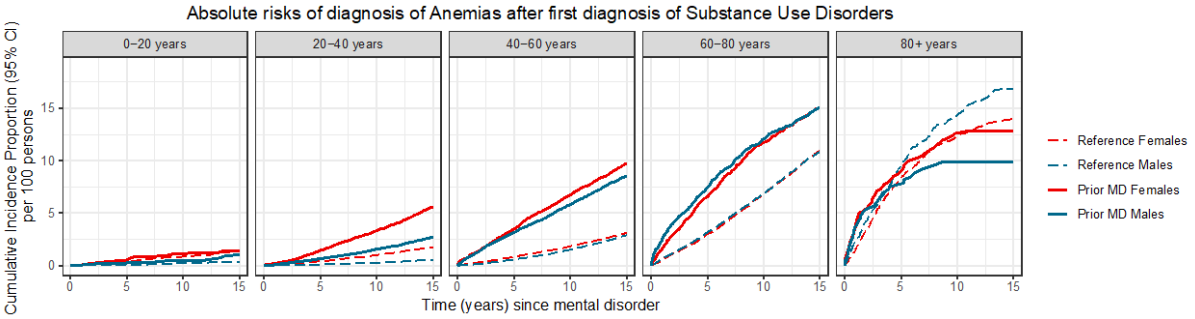


Figure S134.24 – Cancer

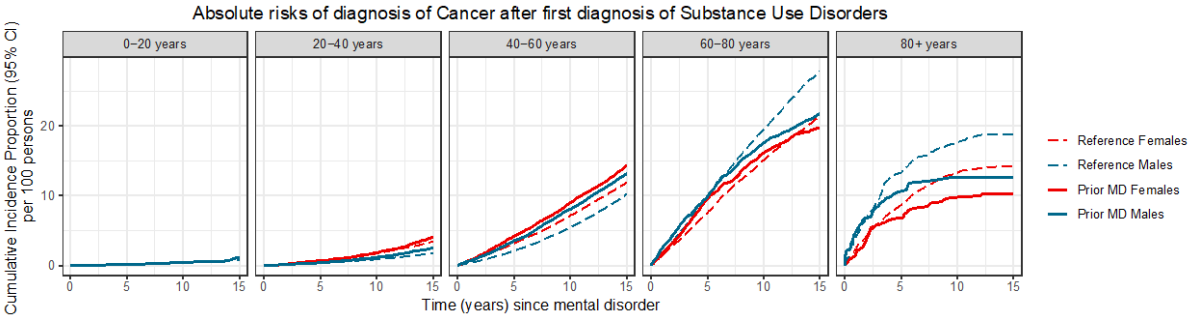


Figure S134.25 – Vision Problems

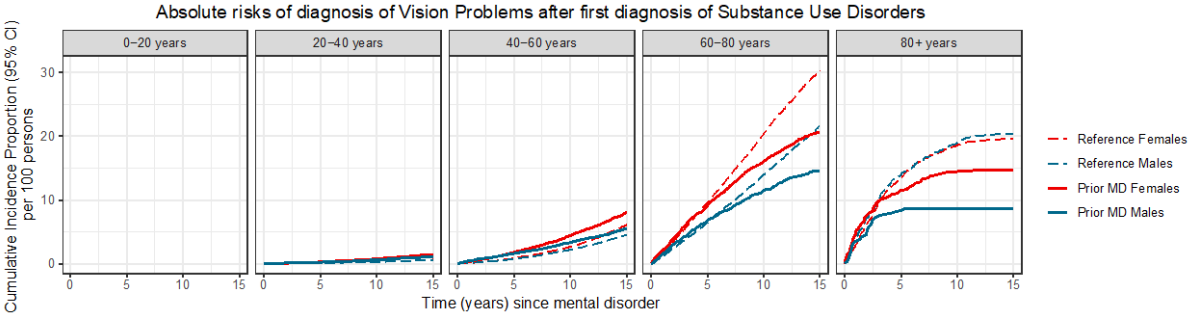


Figure S134.26 – Hearing Problems

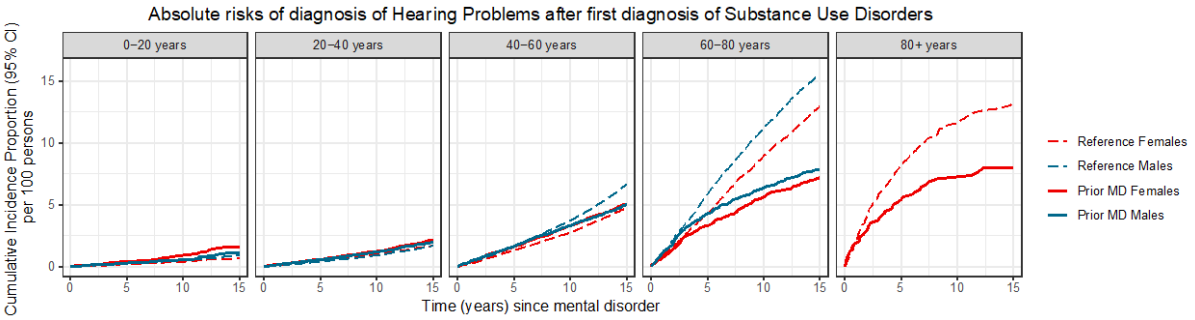


Figure S134.27 – Migraine

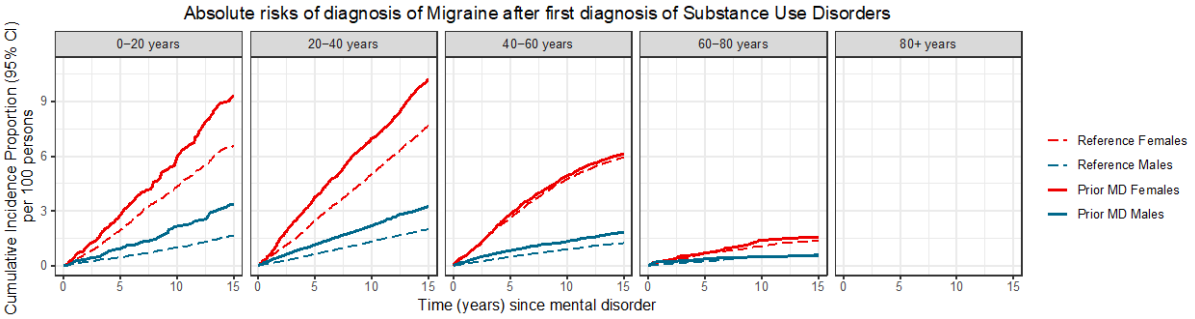


Figure S134.28 – Epilepsy

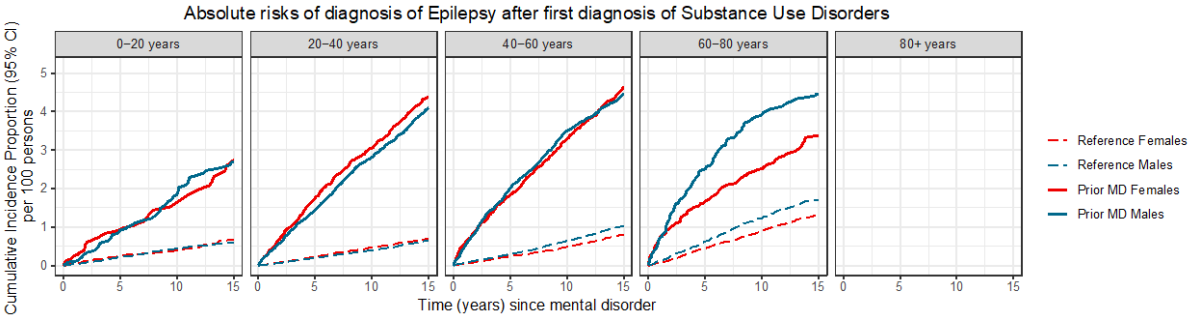


Figure S134.29 – Parkinson's Disease

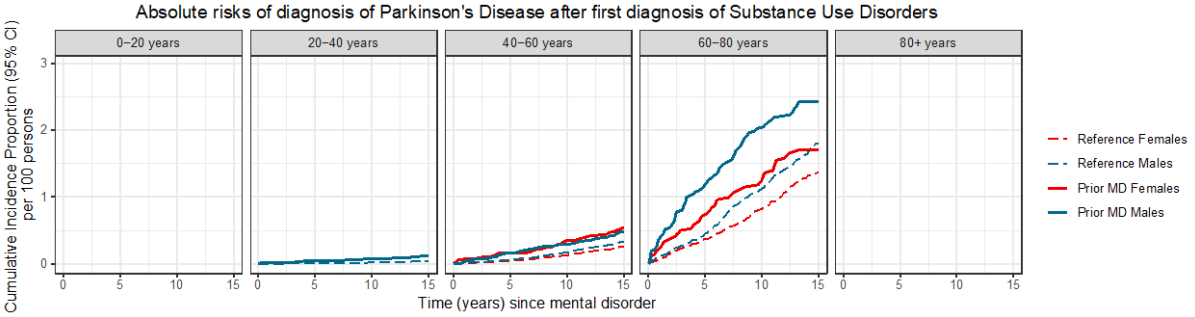


Figure S134.30 – Multiple Sclerosis

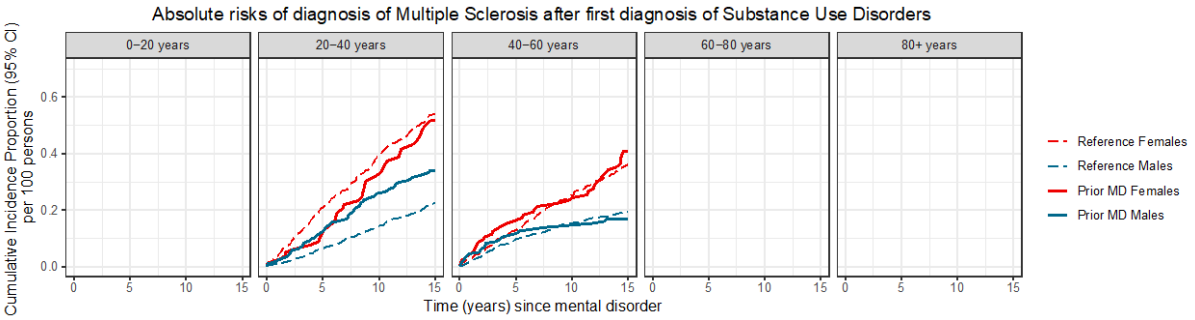
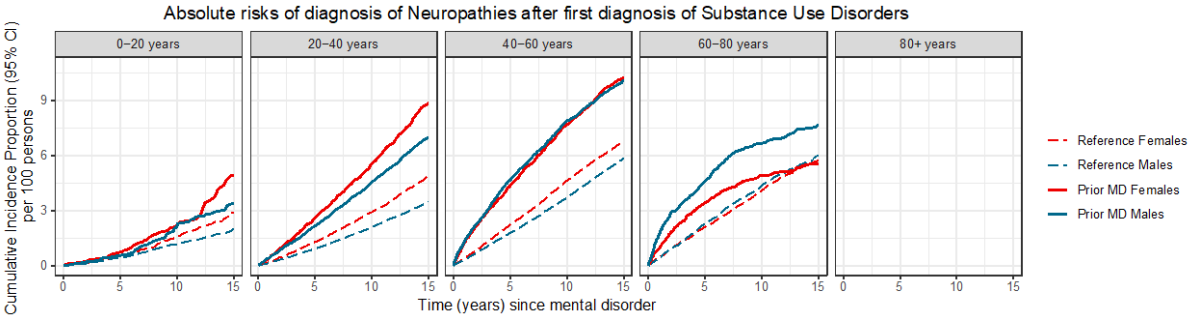


Figure S134.31 – Neuropathies



Figures S135.1-S135.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Schizophrenia

Figure S135.1 - Hypertension

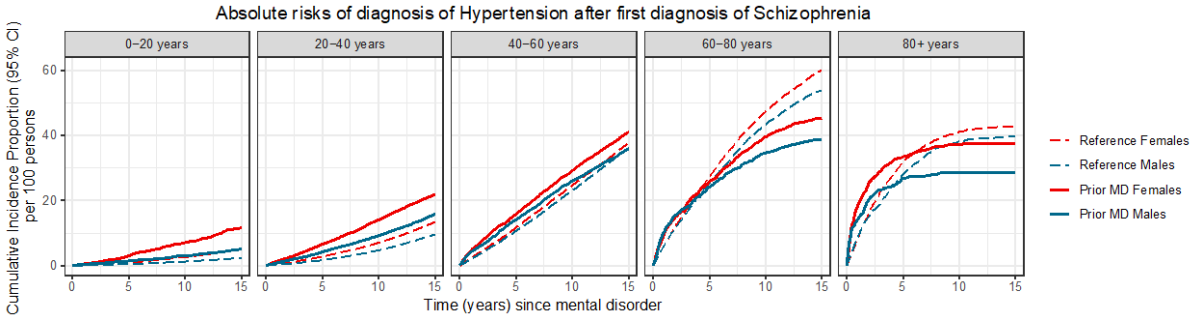


Figure S135.2 – Dyslipidemia

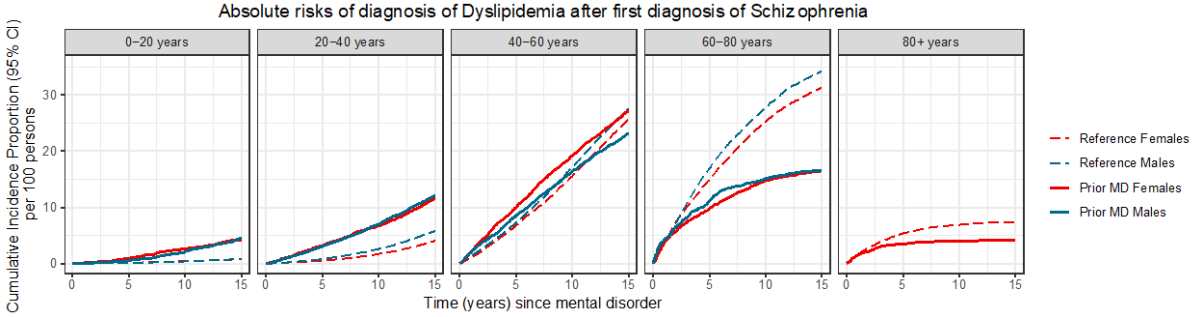


Figure S135.3 – Ischemic Heart Disease

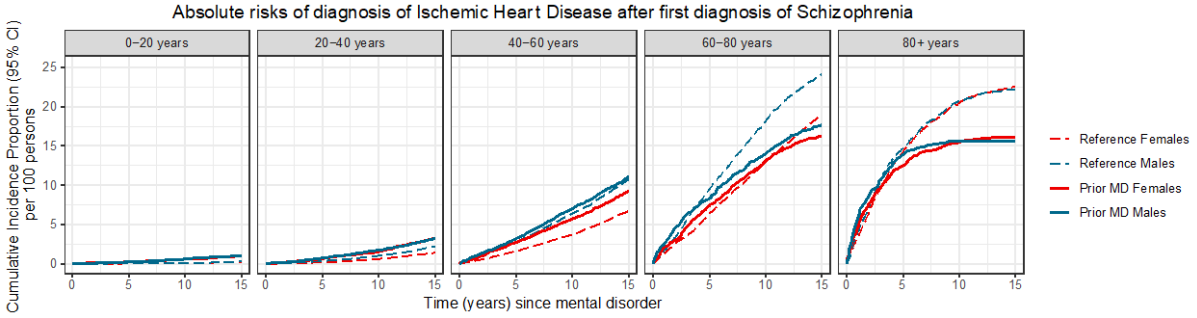


Figure S135.4 – Atrial Fibrillation

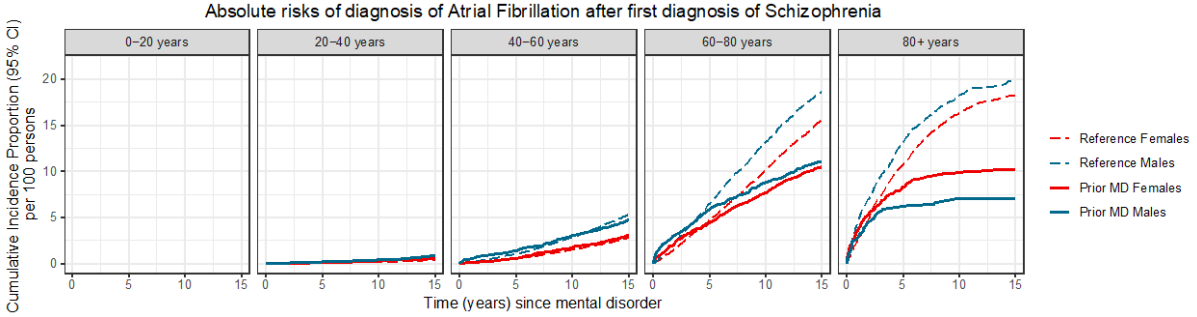


Figure S135.5 – Heart Failure

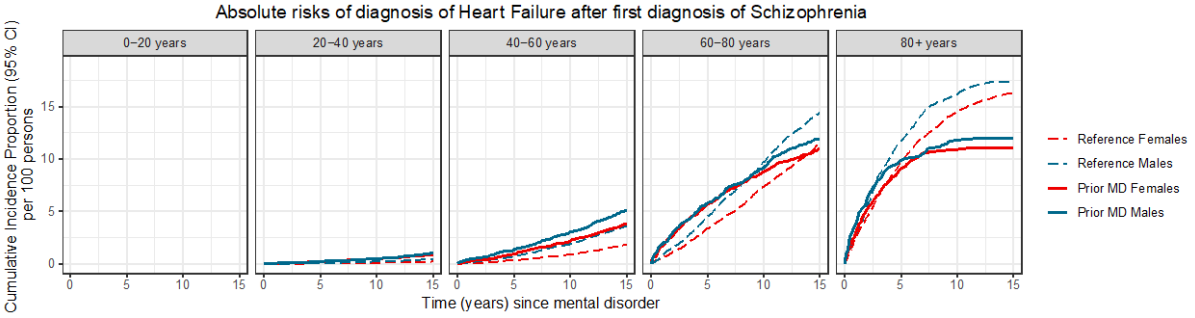


Figure S135.6 – Peripheral Artery Occlusive Disease

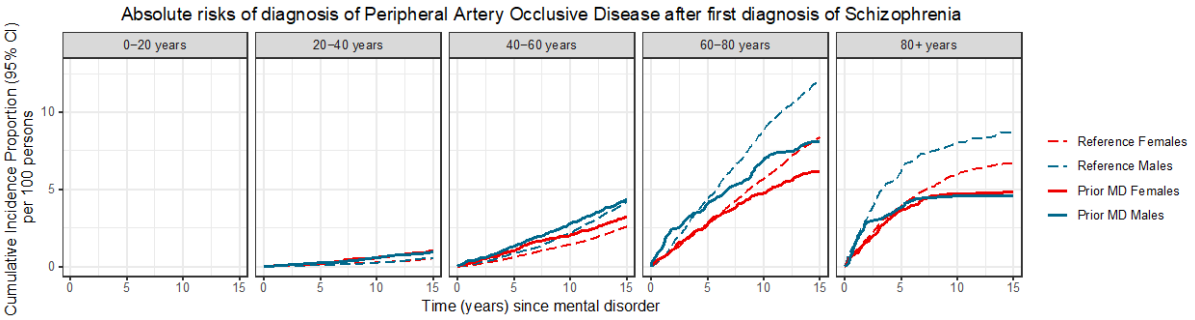


Figure S135.7 – Stroke

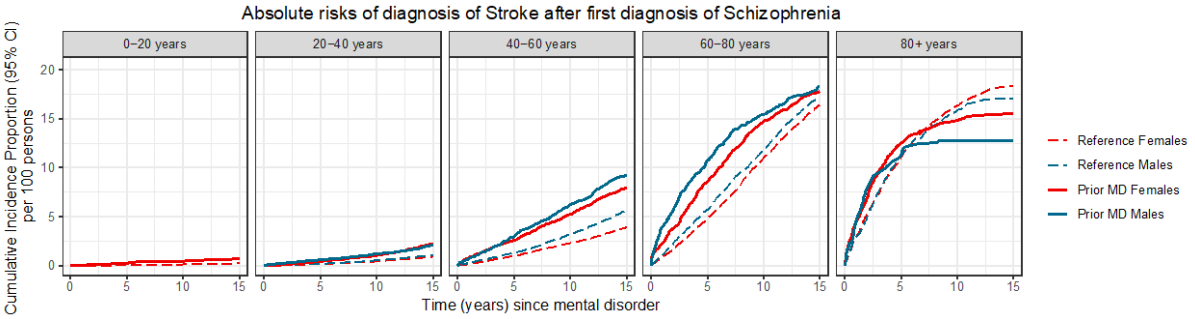


Figure S135.8 – Diabetes Mellitus

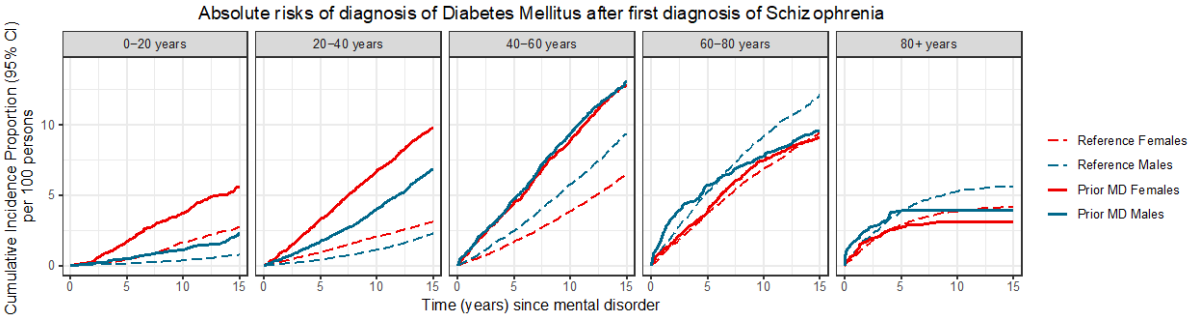


Figure S135.9 – Thyroid Disorders

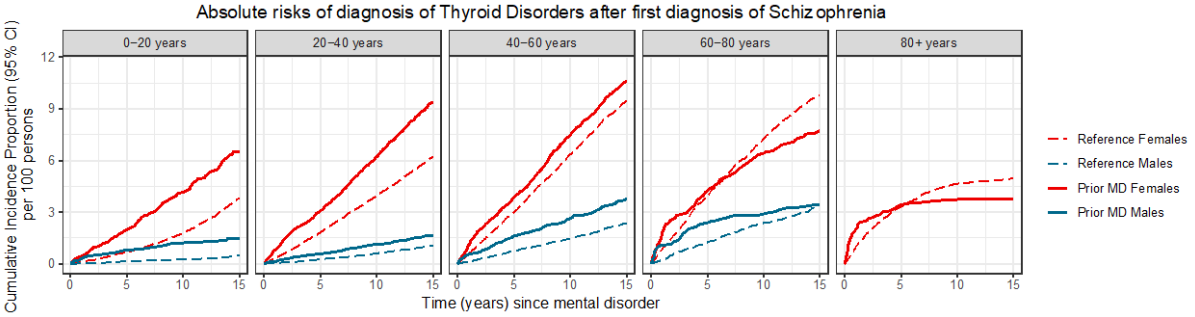


Figure S135.10 – Gout

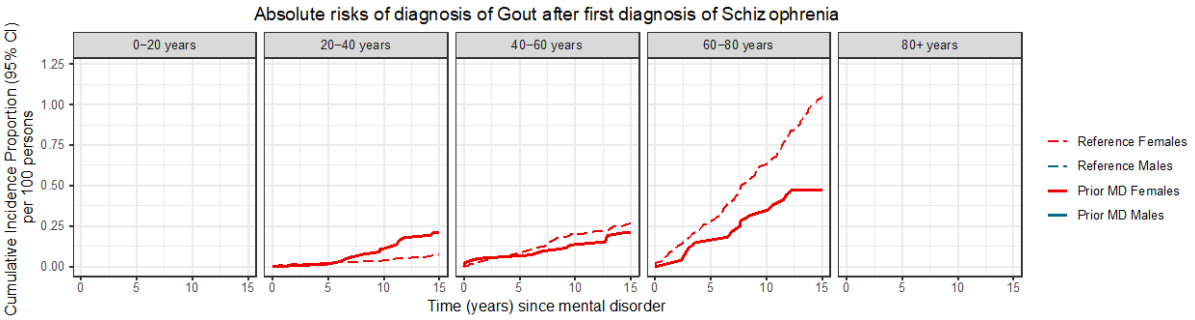


Figure S135.11 – Chronic Pulmonary Disease

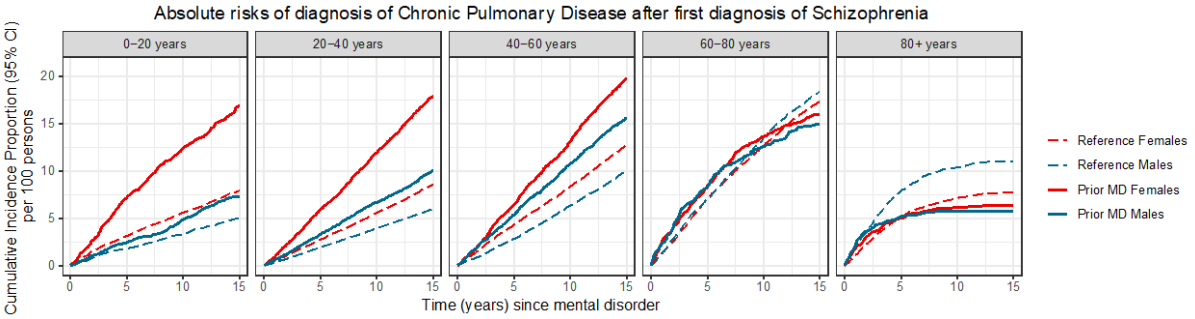


Figure S135.12 – Allergy

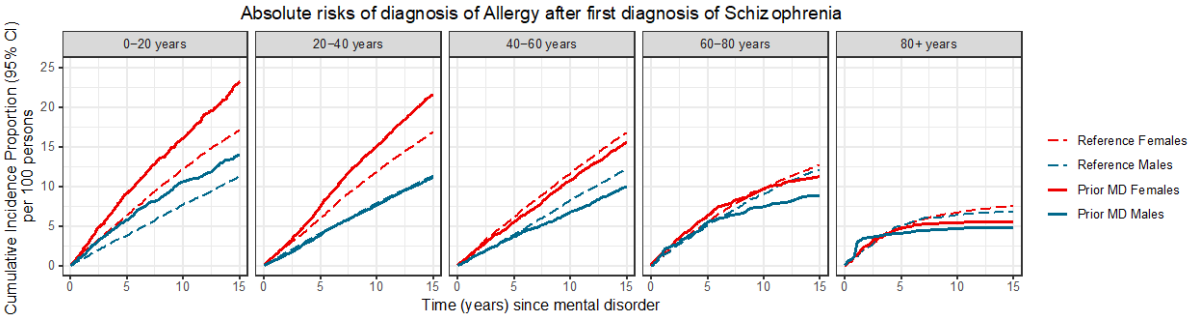


Figure S135.13 – Ulcer/Chronic Gastritis

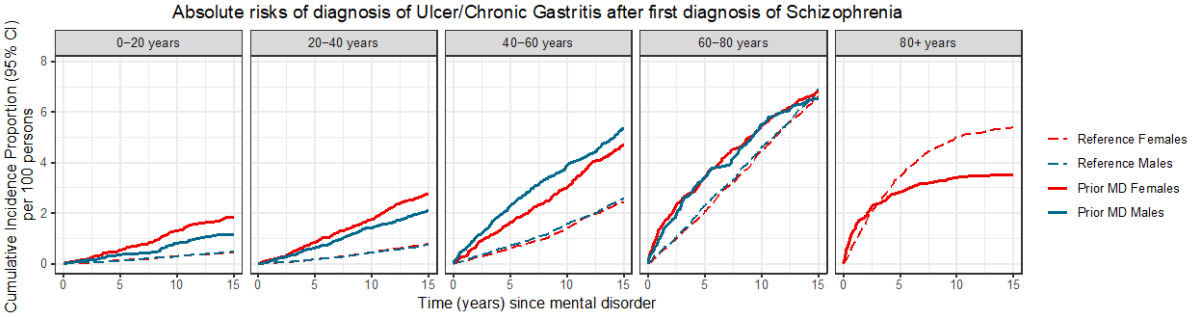


Figure S135.14 – Chronic Liver Disease

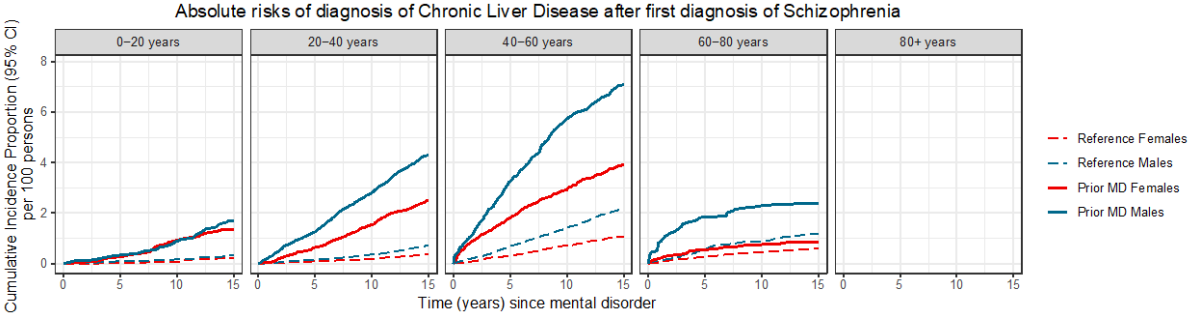


Figure S135.15 – Inflammatory Bowel Disease

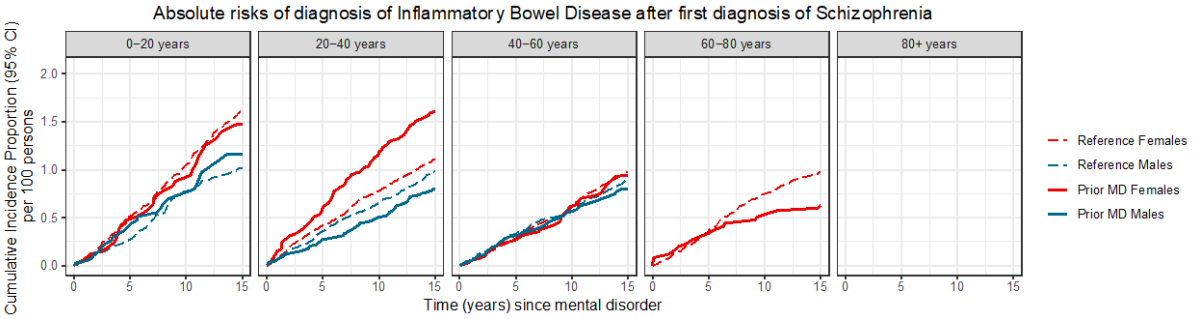


Figure S135.16 – Diverticular Disease of the Intestine

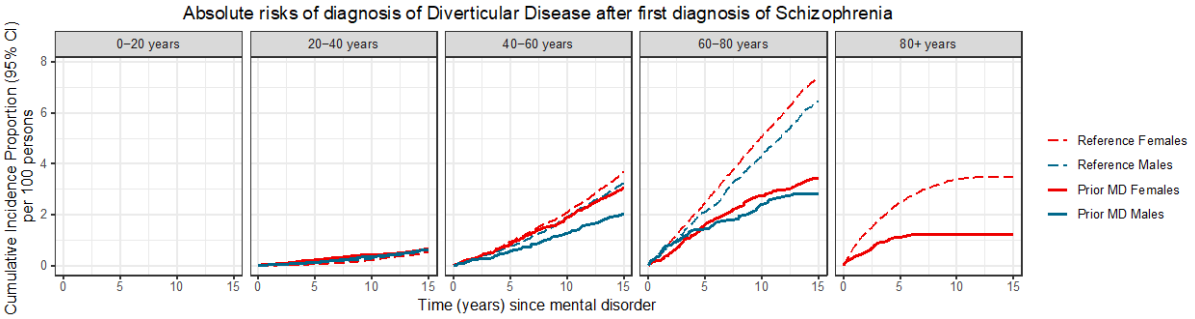


Figure S135.17 – Chronic Kidney Disease

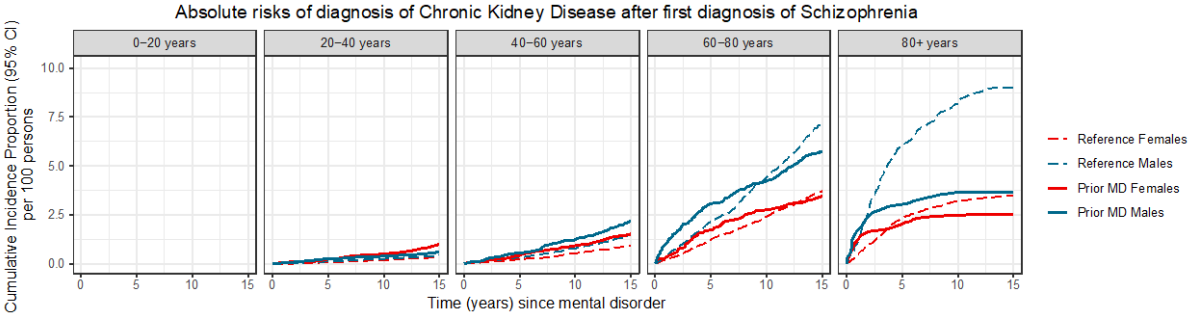


Figure S135.18 – Prostate Disorders

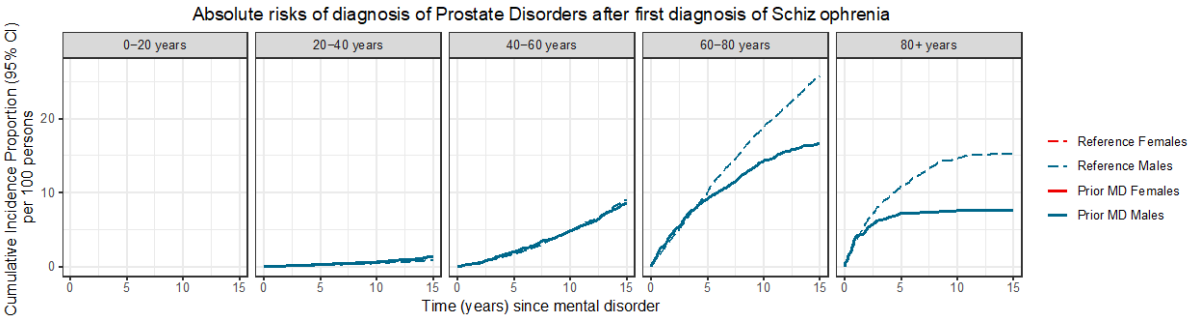


Figure S135.19 – Connective Tissue Disorders

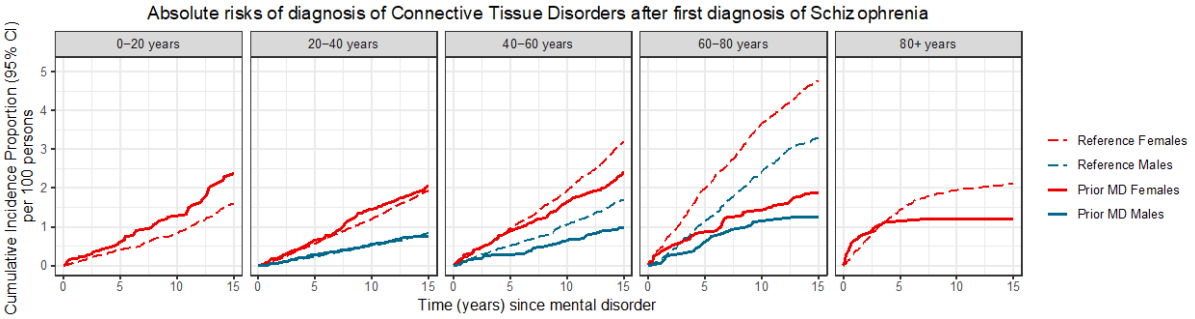


Figure S135.20 – Osteoporosis

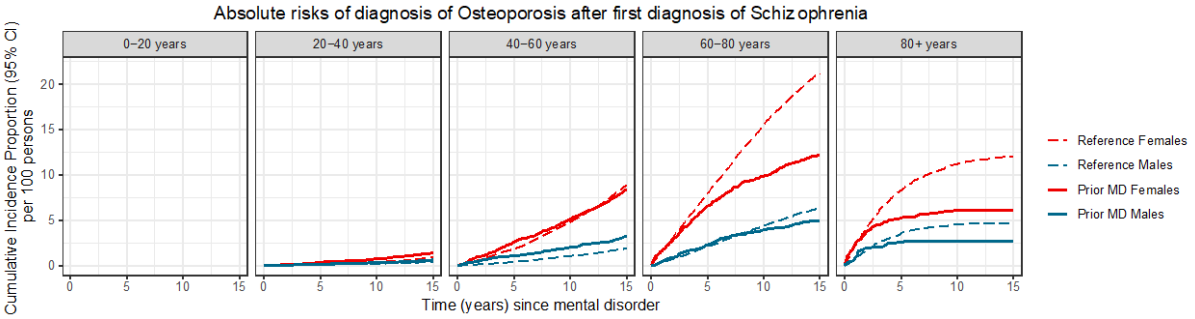


Figure S135.21 – Painful Conditions

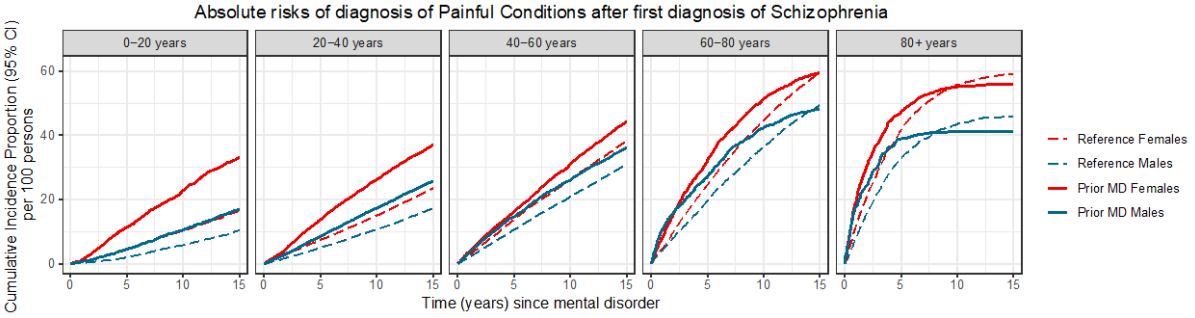


Figure S135.22 – HIV/AIDS

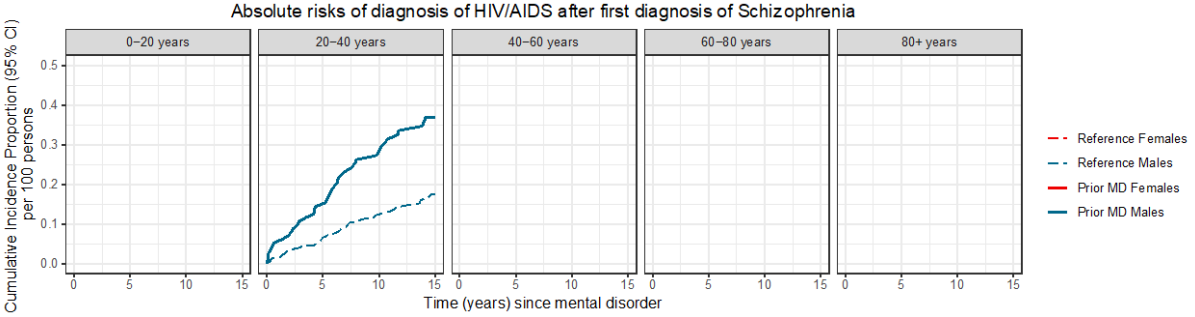


Figure S135.23 – Anemias

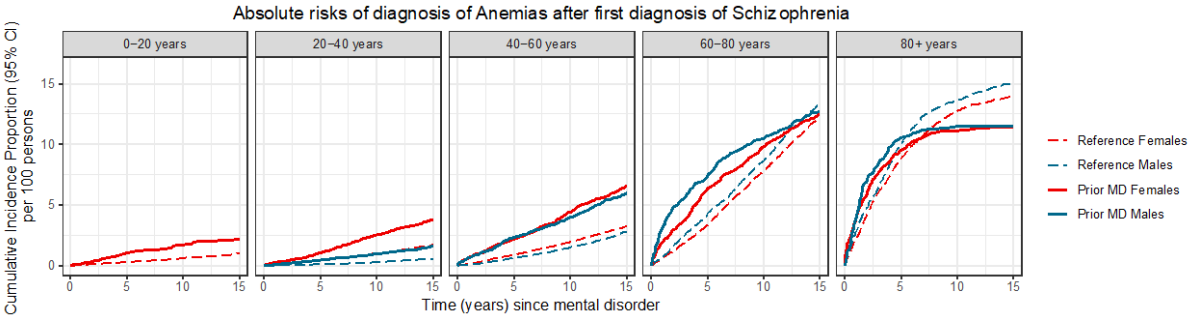


Figure S135.24 – Cancer

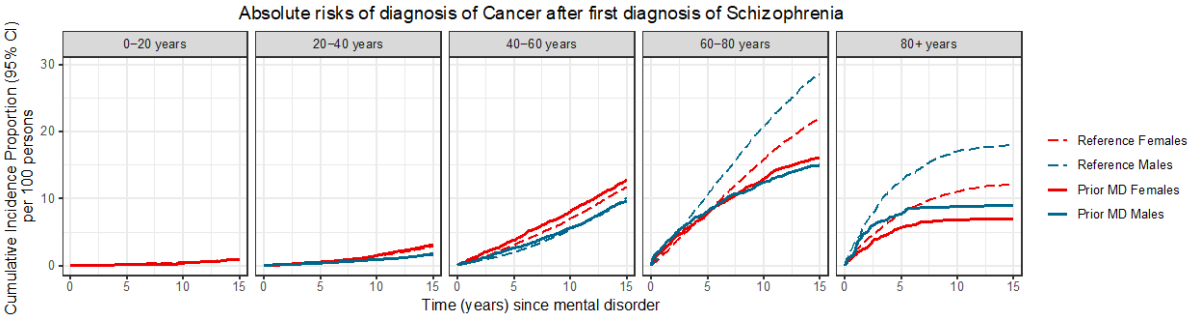


Figure S135.25 – Vision Problems

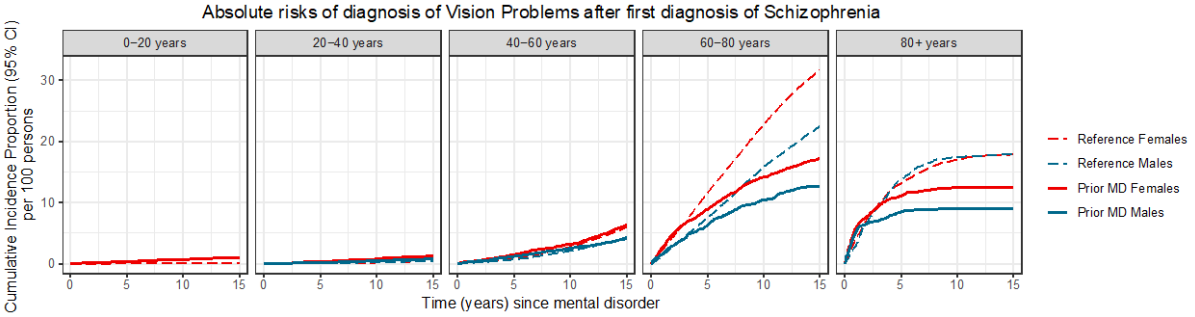


Figure S135.26 – Hearing Problems

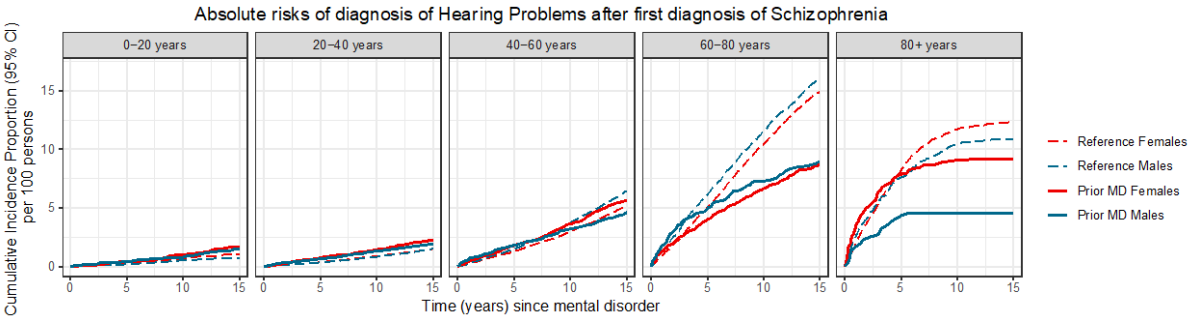
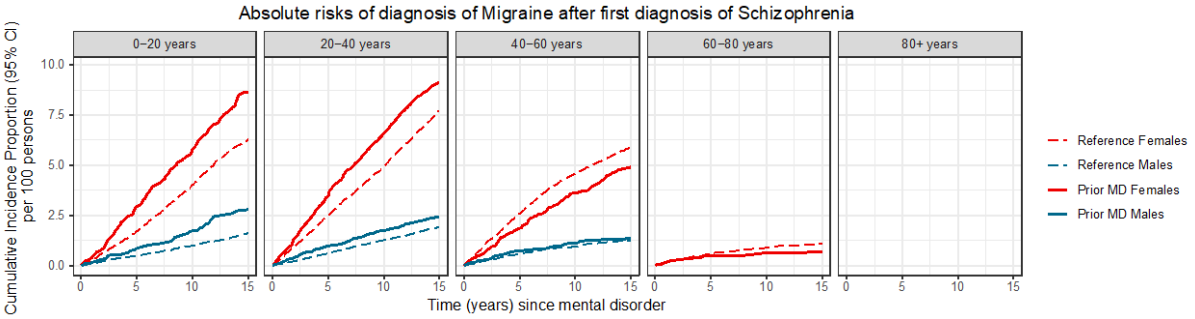


Figure S135.27 – Migraine



‘Figure S135.28 – Epilepsy

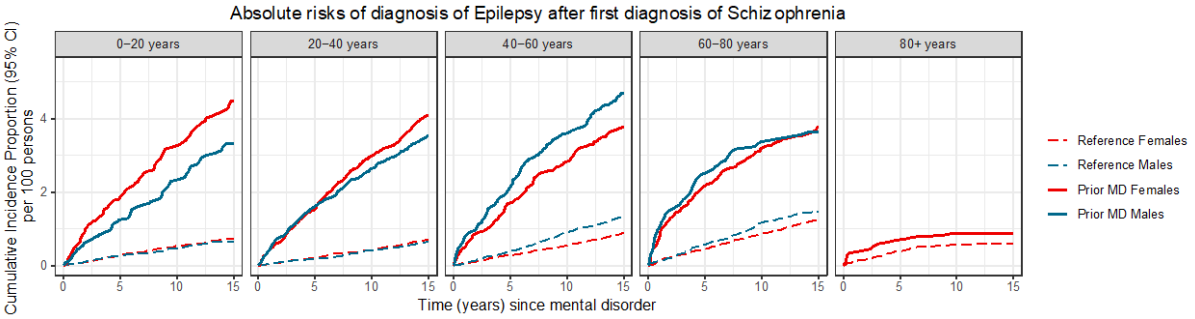


Figure S135.29 – Parkinson's Disease

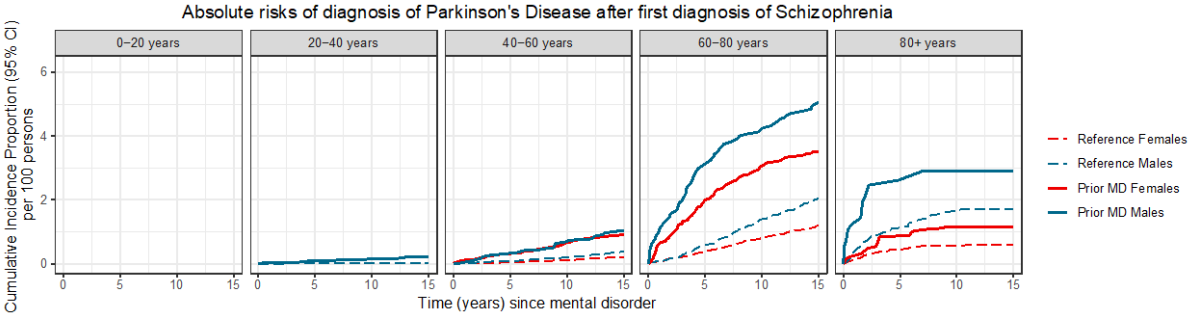


Figure S135.30 – Multiple Sclerosis

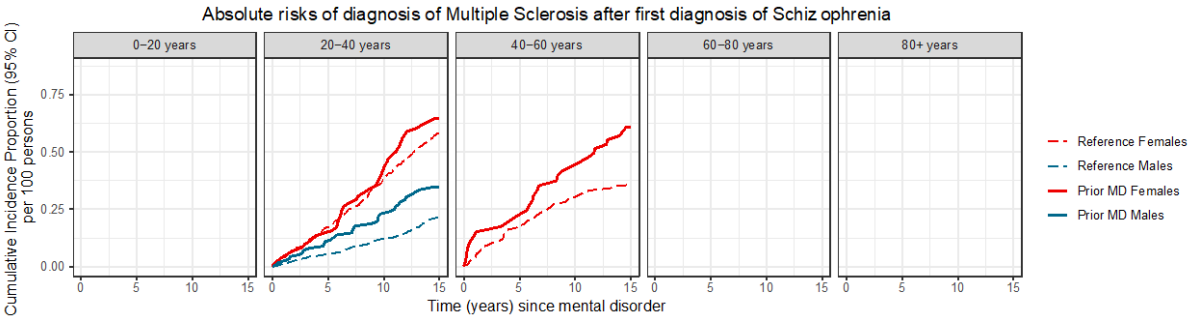
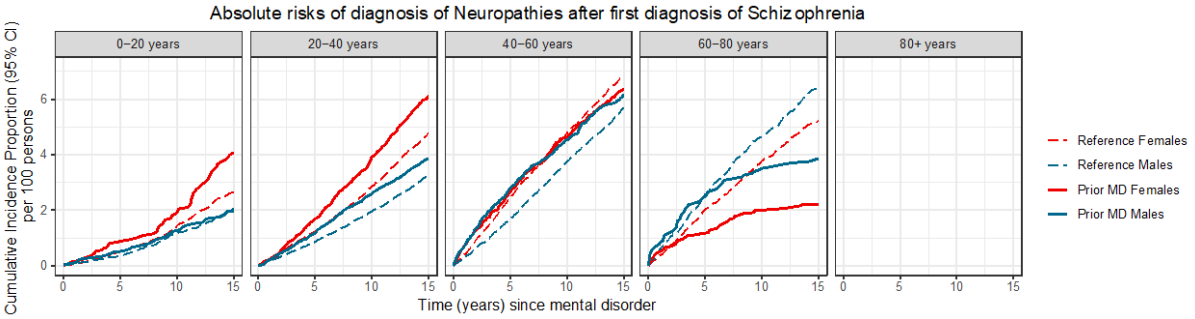


Figure S135.31 – Neuropathies



Figures S136.1-S136.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Mood Disorders

Figure S136.1 - Hypertension

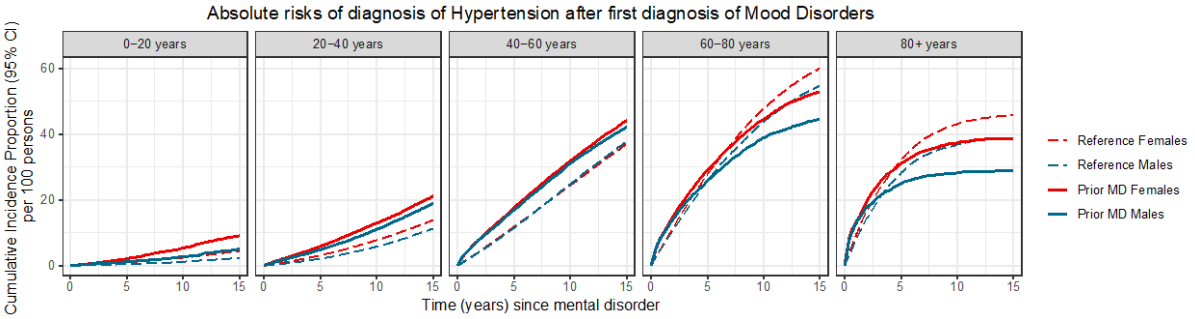


Figure S136.2 – Dyslipidemia

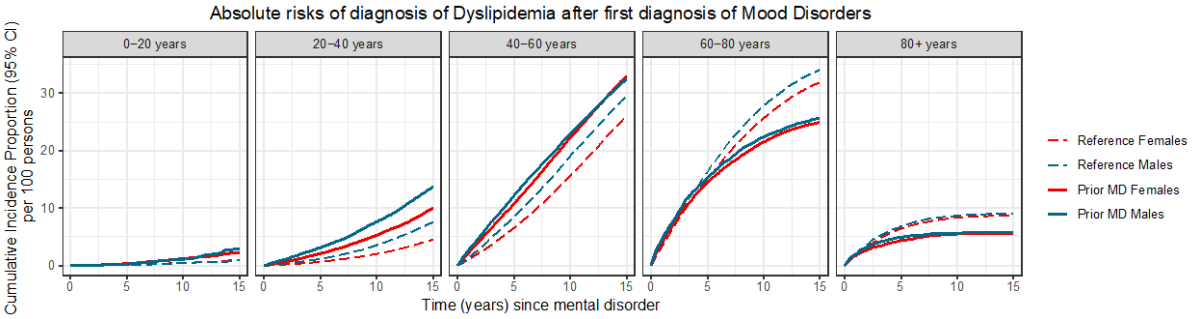


Figure S136.3 – Ischemic Heart Disease

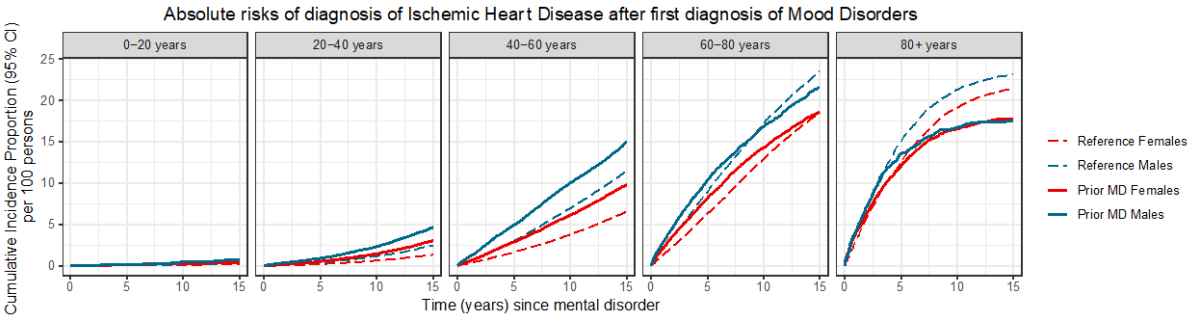


Figure S136.4 – Atrial Fibrillation

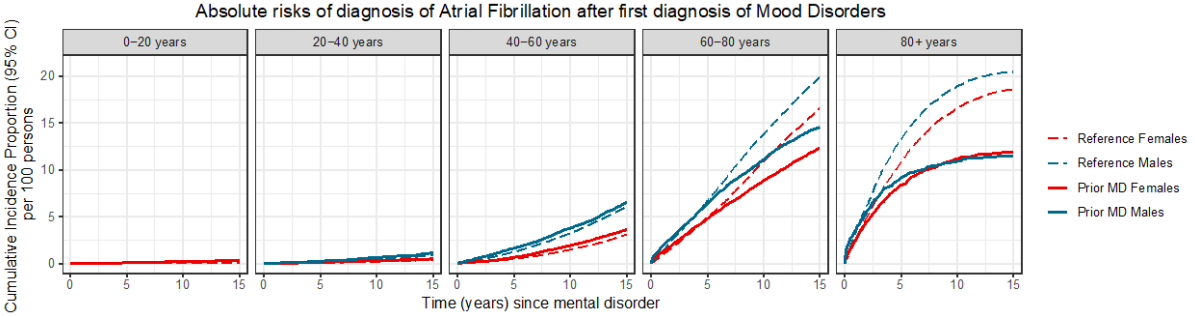


Figure S136.5 –Heart Failure

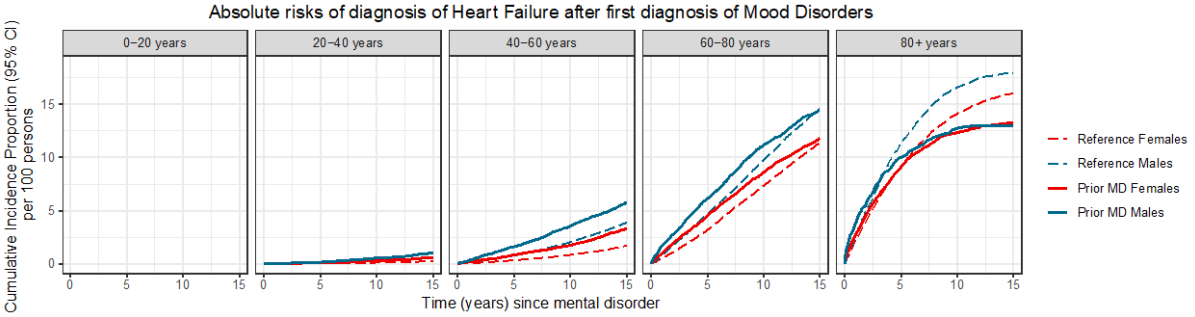


Figure S136.6 – Peripheral Artery Occlusive Disease

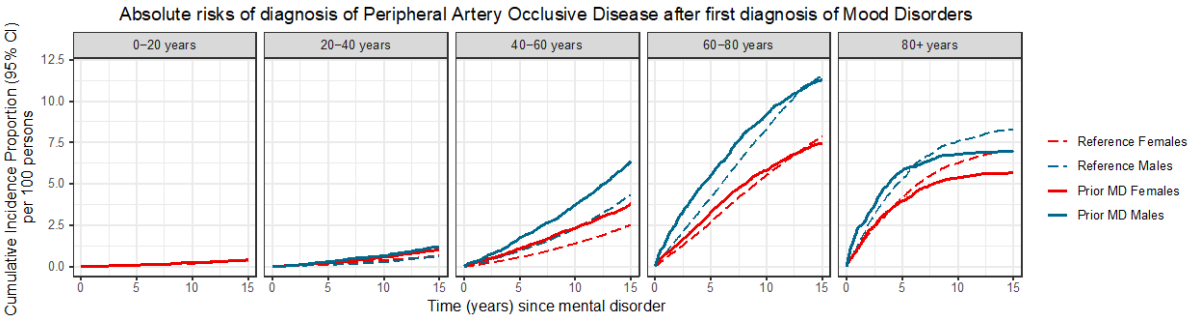


Figure S136.7 – Stroke

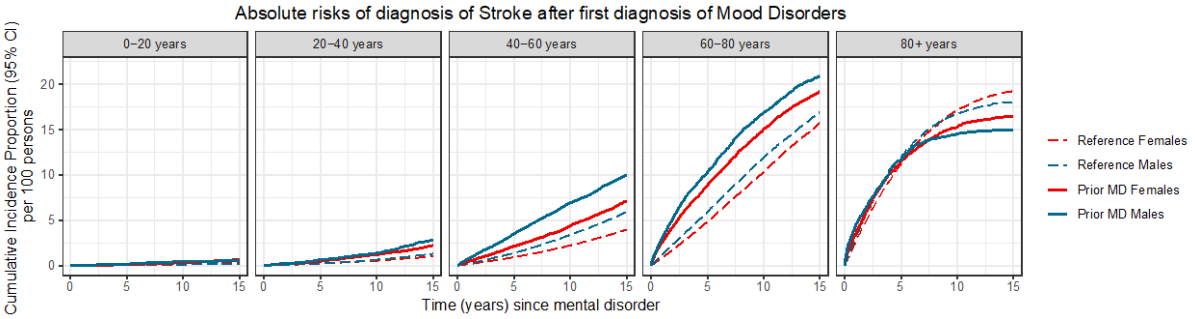


Figure S136.8 – Diabetes Mellitus

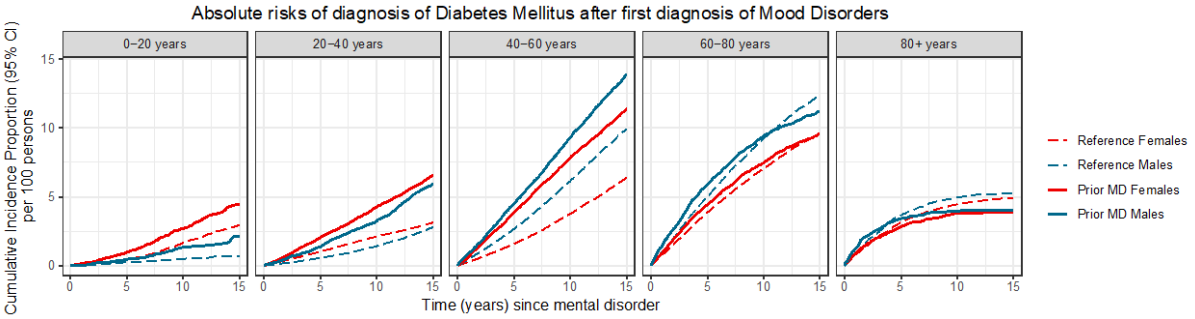


Figure S136.9 – Thyroid Disorders

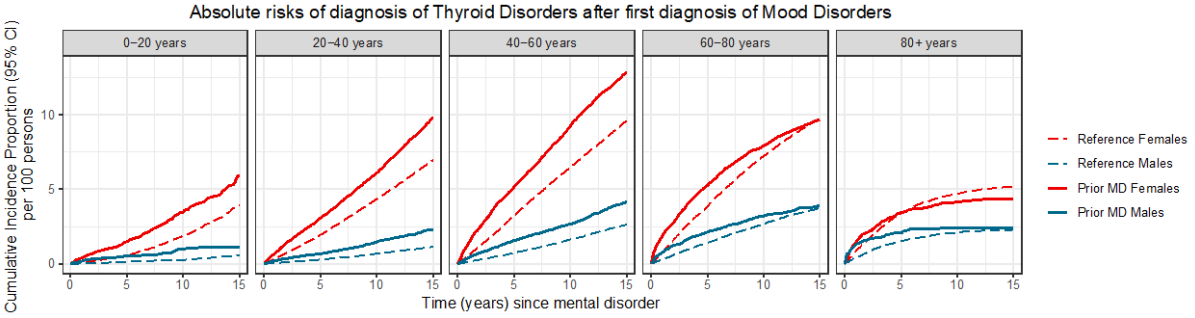


Figure S136.10 – Gout

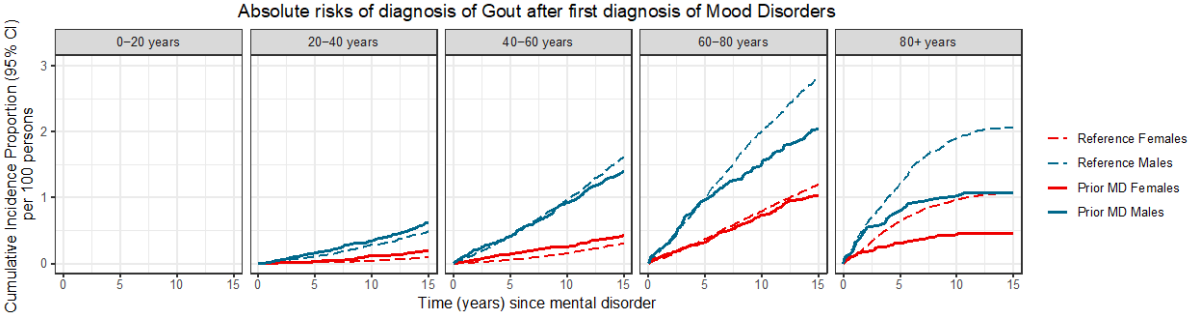


Figure S136.11 – Chronic Pulmonary Disease

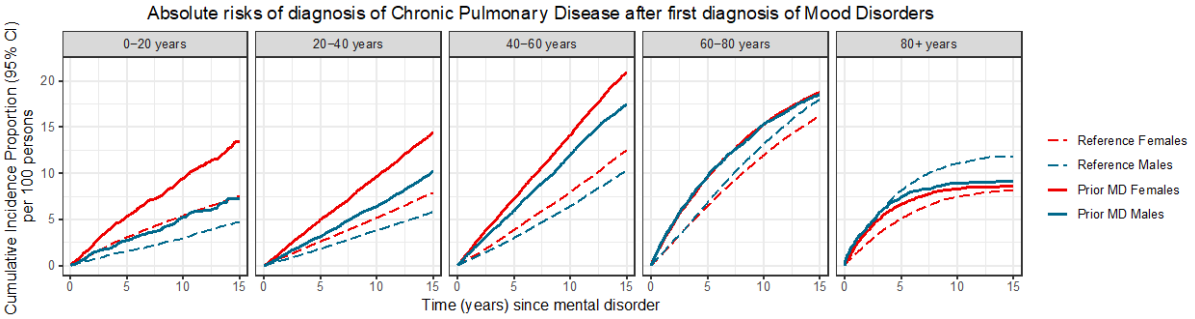


Figure S136.12 – Allergy

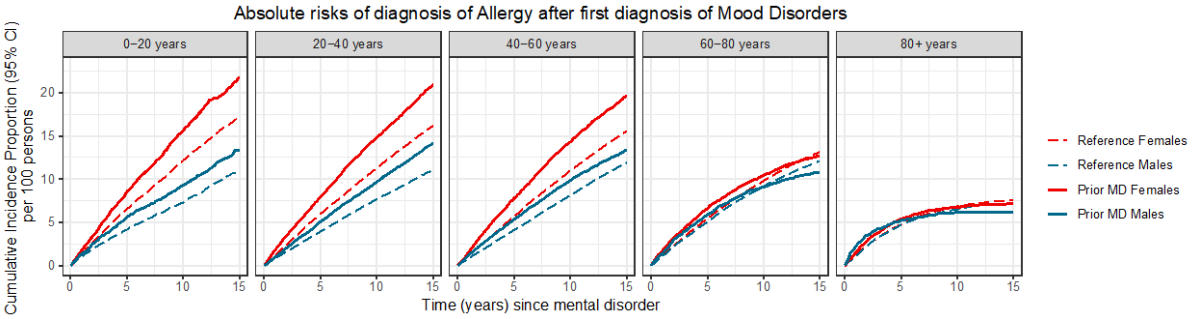


Figure S136.13 – Ulcer/Chronic Gastritis

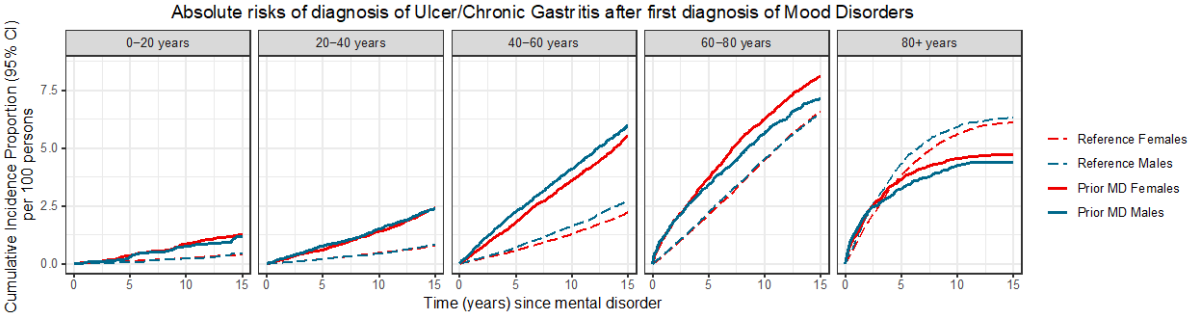


Figure S136.14 – Chronic Liver Disease

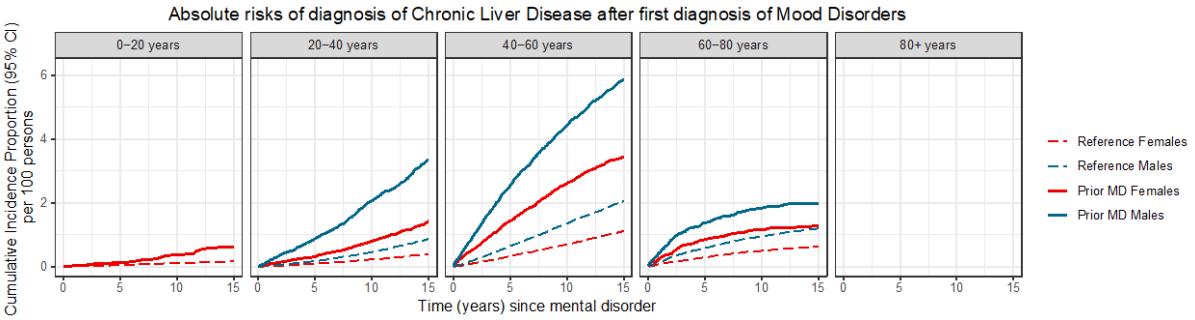


Figure S136.15 – Inflammatory Bowel Disease

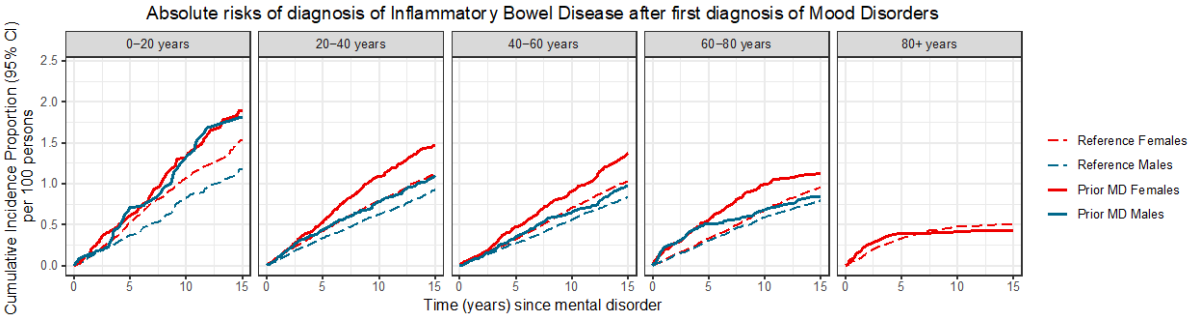


Figure S136.16 – Diverticular Disease of the Intestine

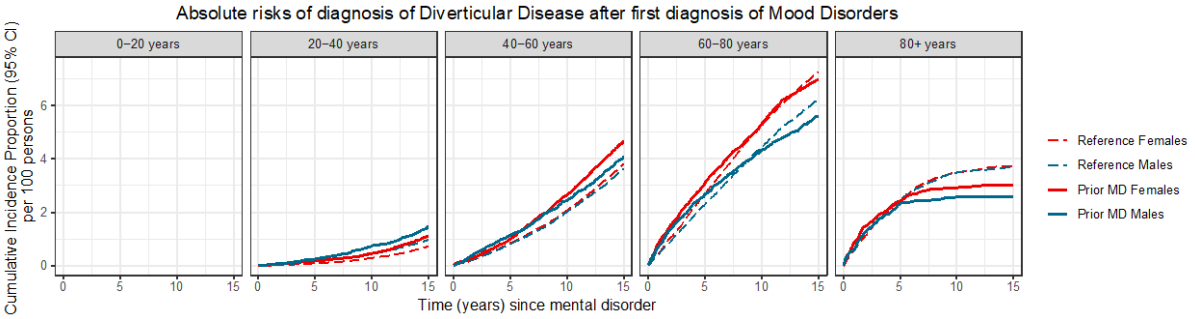


Figure S136.17 – Chronic Kidney Disease

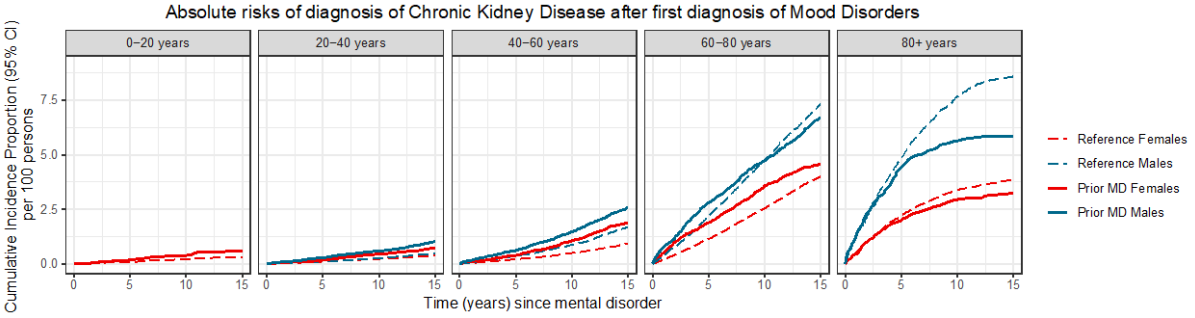


Figure S136.18 – Prostate Disorders

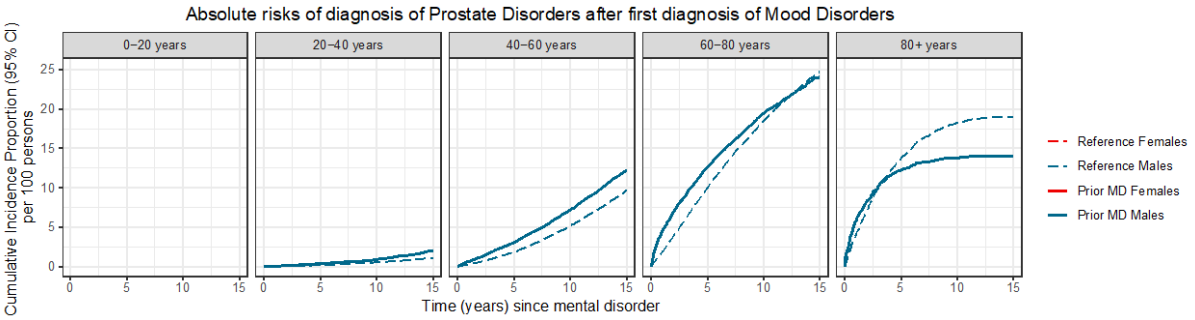


Figure S136.19 – Connective Tissue Disorders

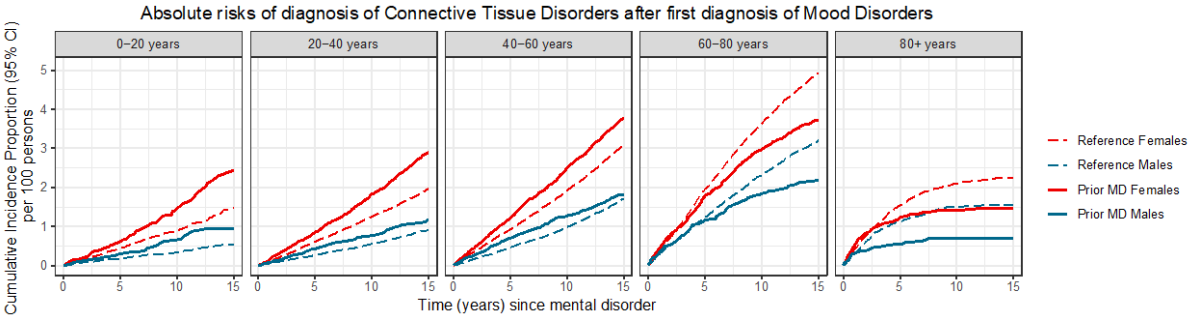


Figure S136.20 – Osteoporosis

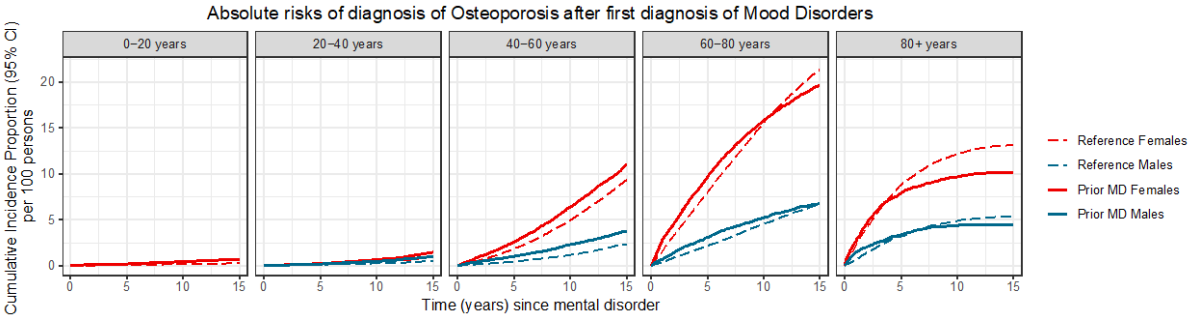


Figure S136.21 – Painful Conditions

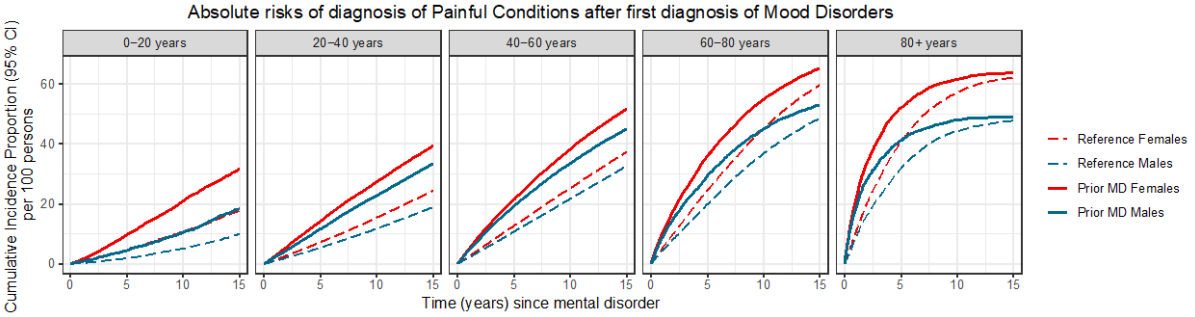


Figure S136.22 – HIV/AIDS

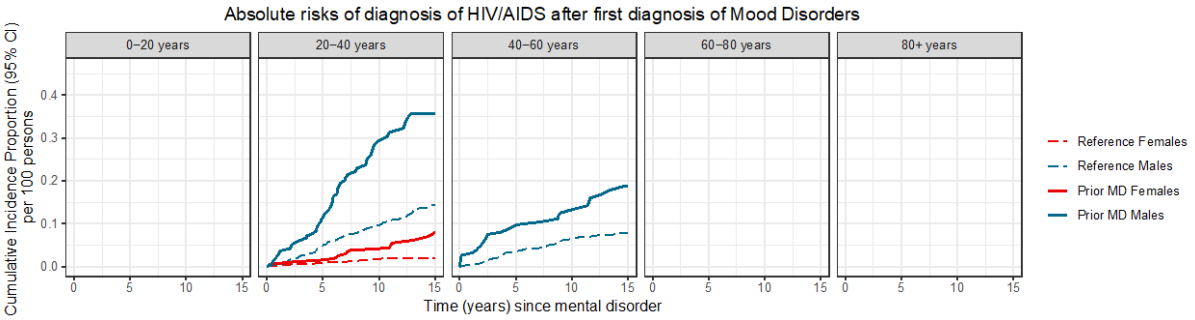


Figure S136.23 – Anemias

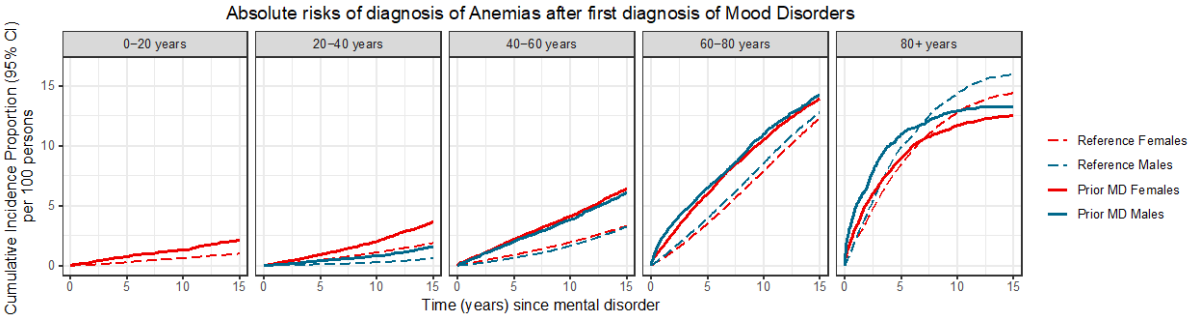


Figure S136.24 – Cancer

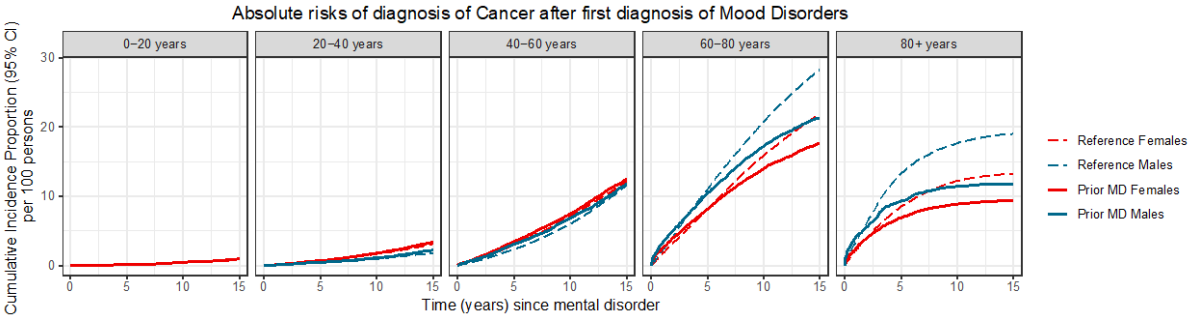


Figure S136.25 – Vision Problems

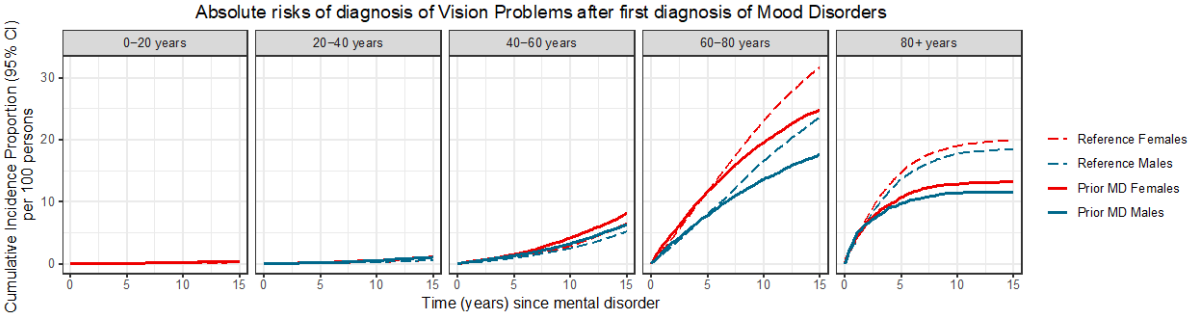


Figure S136.26 – Hearing Problems

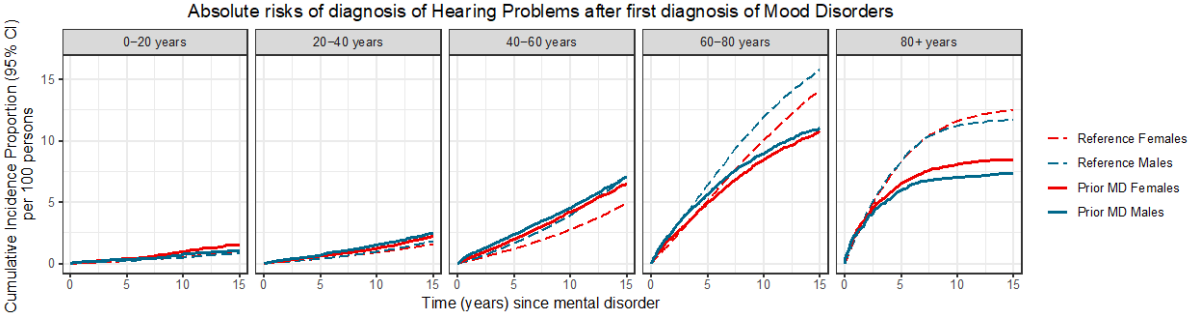


Figure S136.27 – Migraine

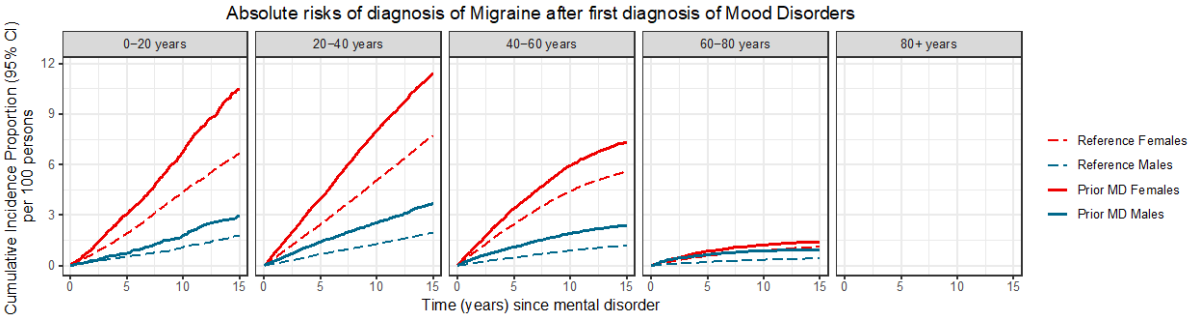


Figure S136.28 – Epilepsy

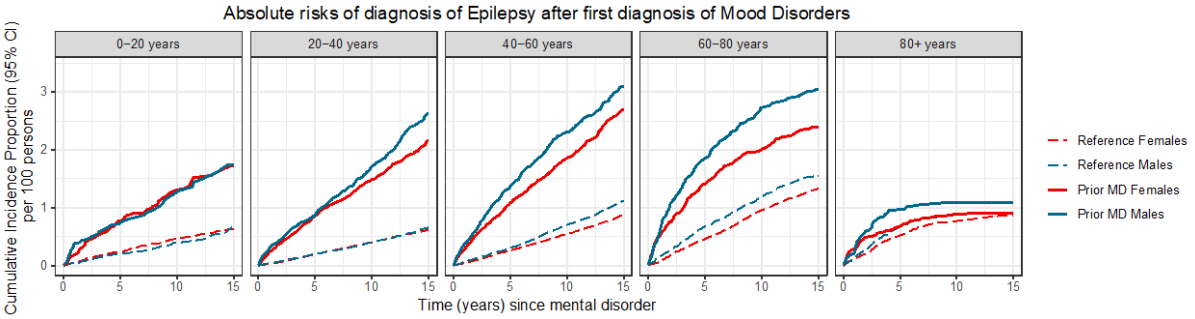


Figure S136.29 – Parkinson's Disease

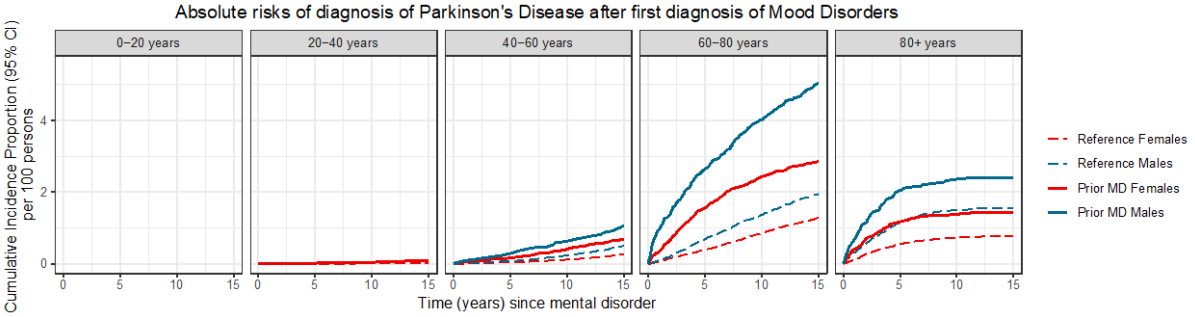


Figure S136.30 – Multiple Sclerosis

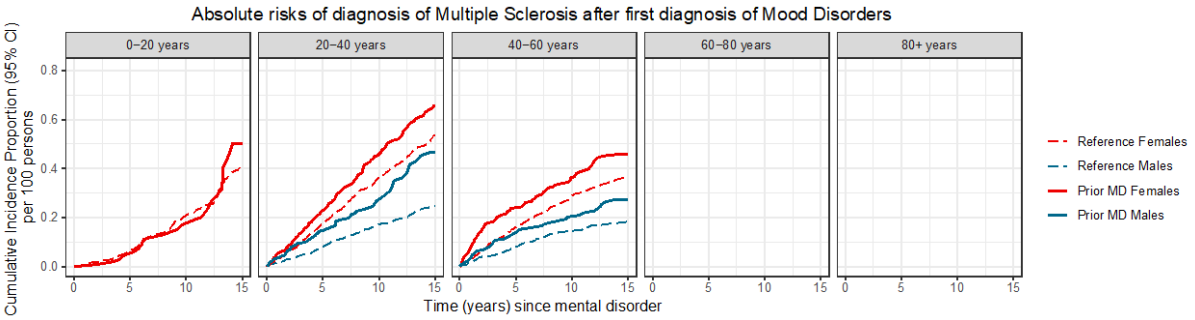
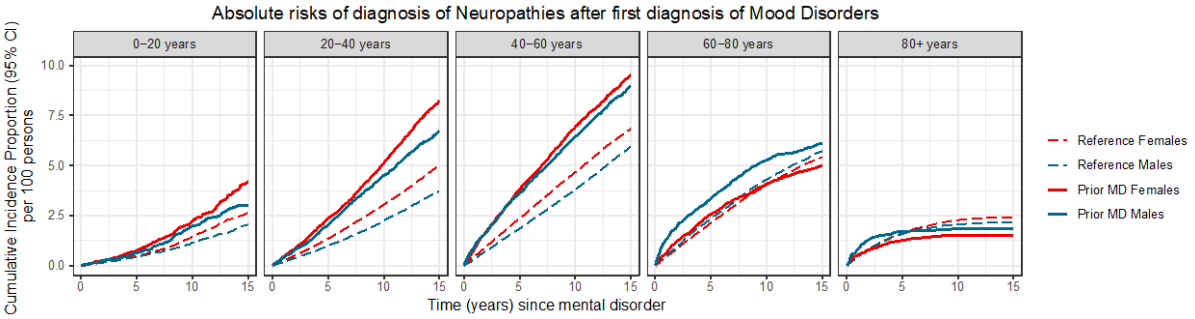


Figure S136.31 – Neuropathies



Figures S137.1-S137.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Neurotic Disorders

Figure S137.1 - Hypertension

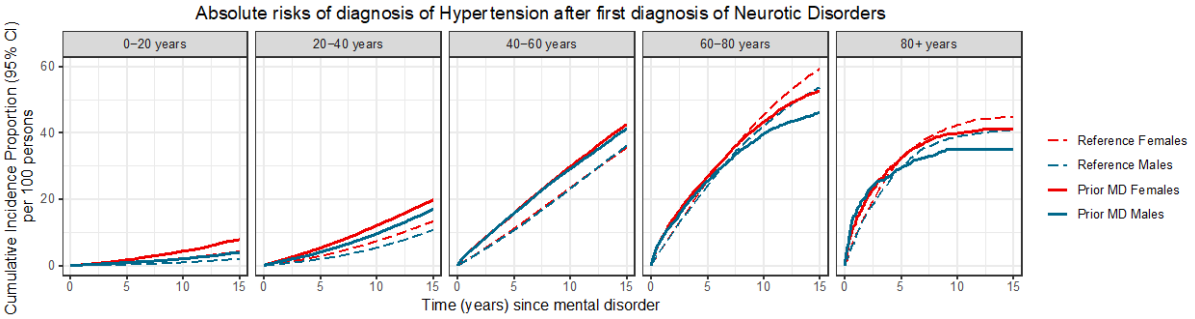


Figure S137.2 – Dyslipidemia

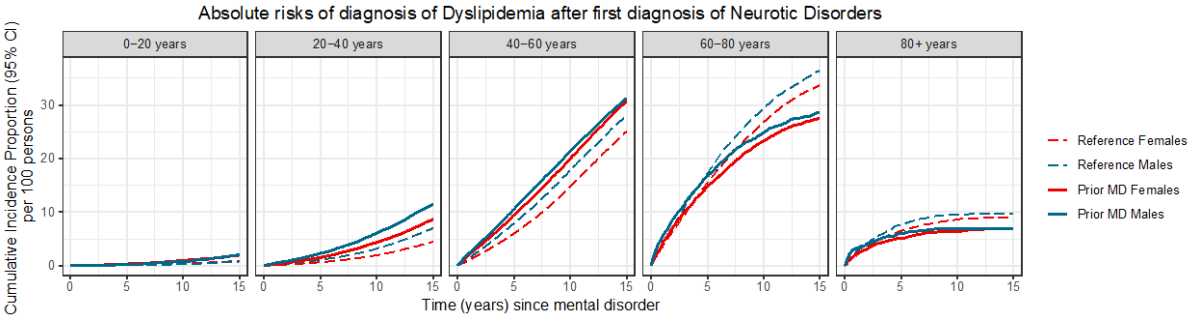


Figure S137.3 – Ischemic Heart Disease

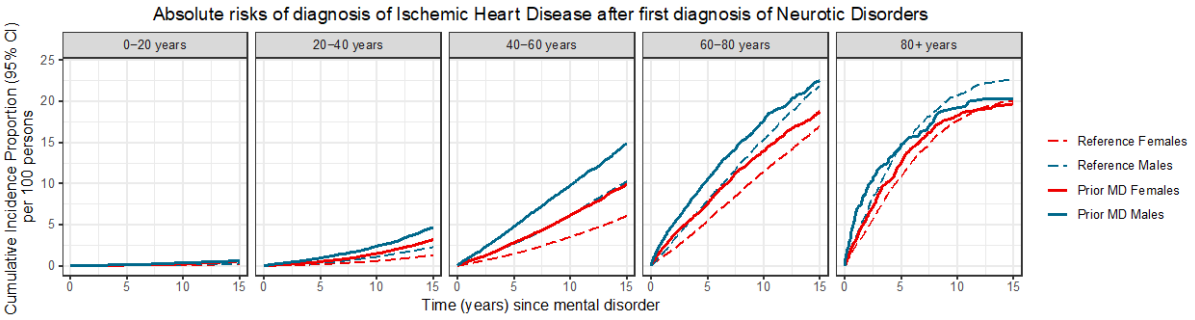


Figure S137.4 – Atrial Fibrillation

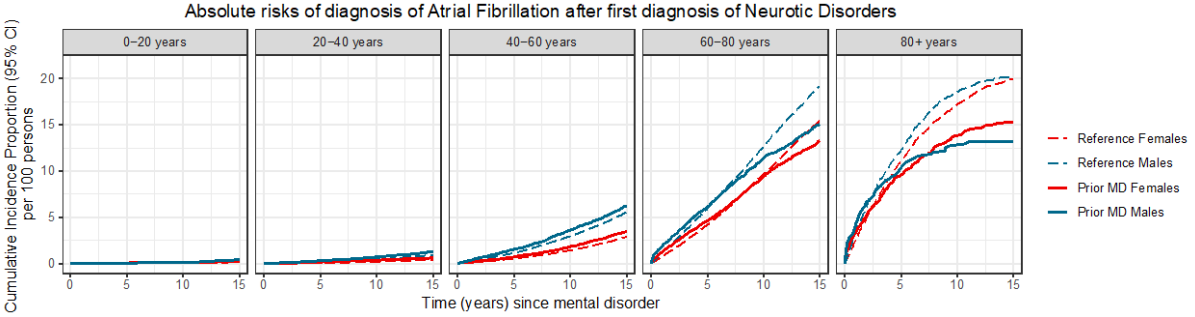


Figure S137.5 – Heart Failure

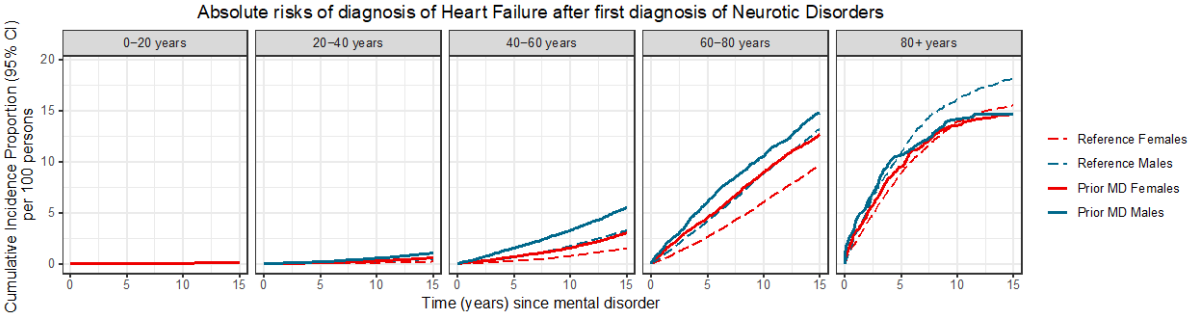


Figure S137.6 – Peripheral Artery Occlusive Disease

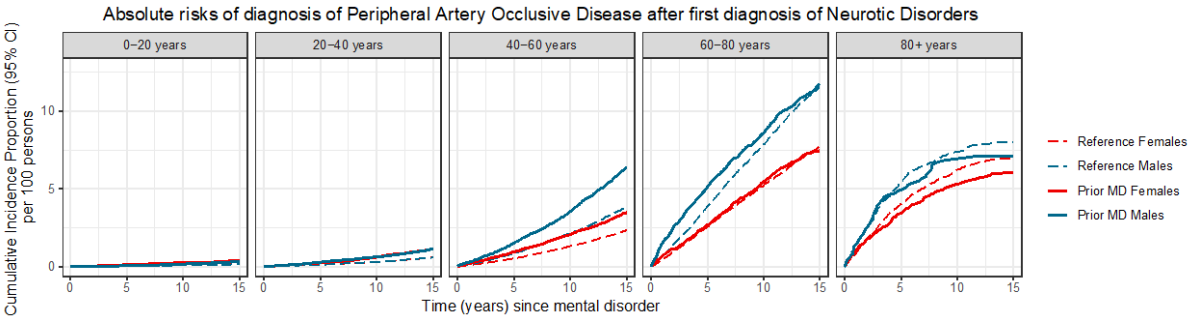


Figure S137.7 – Stroke

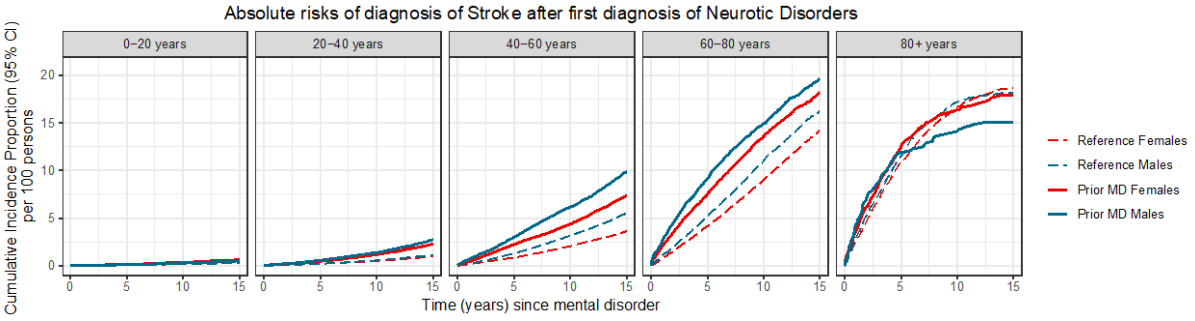


Figure S137.8 – Diabetes Mellitus

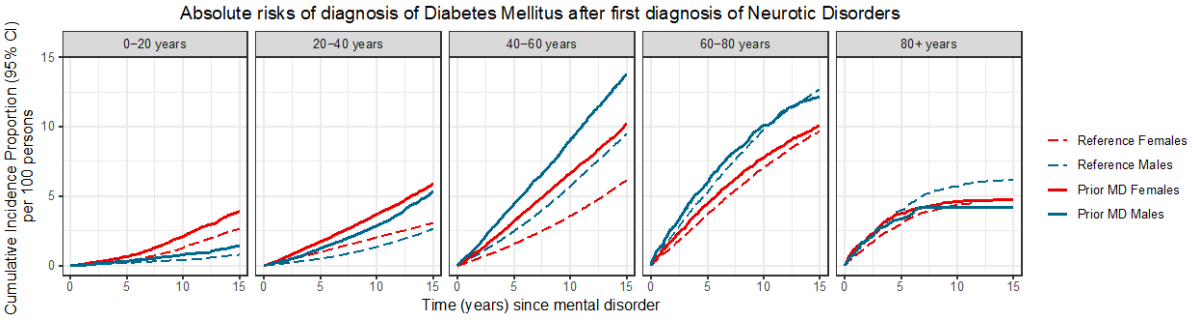


Figure S137.9 – Thyroid Disorders

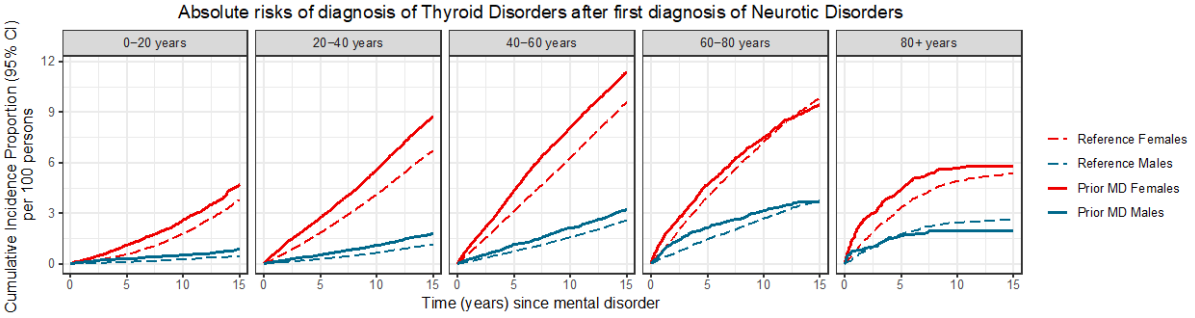


Figure S137.10 – Gout

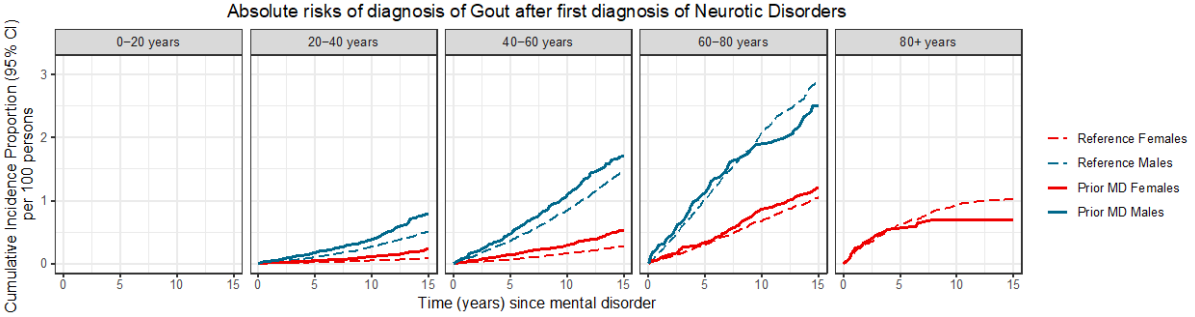


Figure S137.11 – Chronic Pulmonary Disease

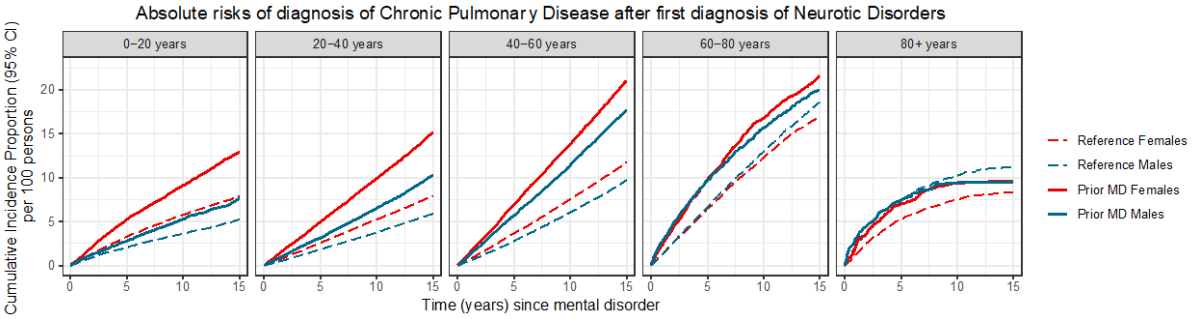


Figure S137.12 – Allergy

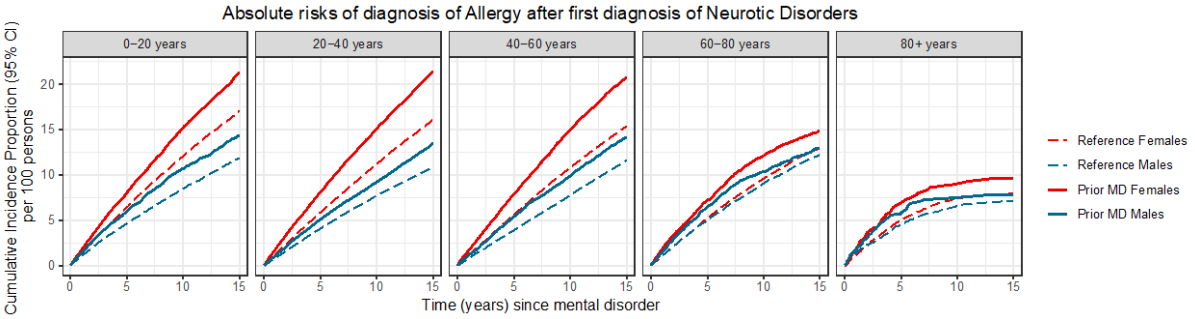


Figure S137.13 – Ulcer/Chronic Gastritis

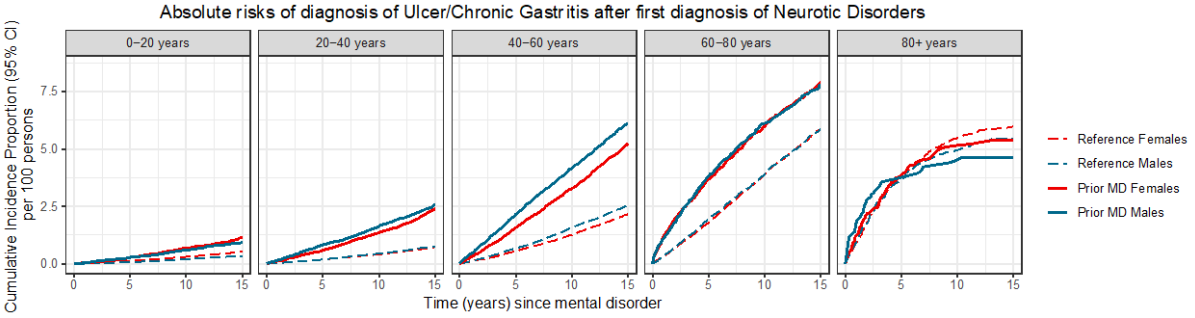


Figure S137.14 – Chronic Liver Disease

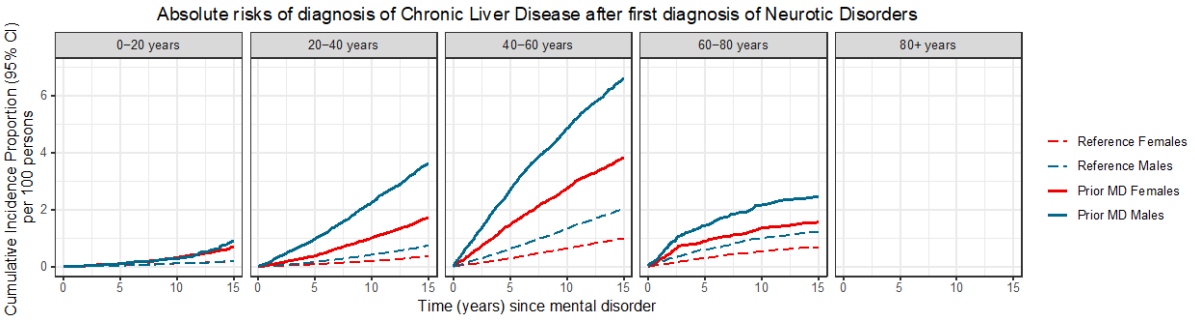


Figure S137.15 – Inflammatory Bowel Disease

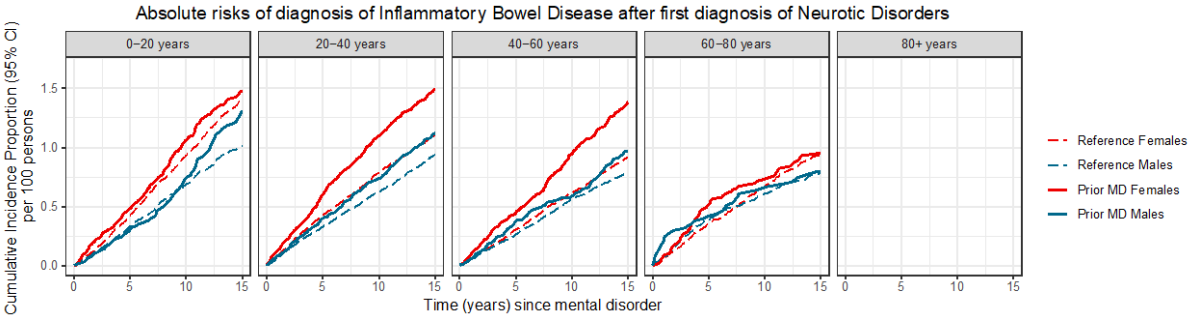


Figure S137.16 – Diverticular Disease of the Intestine

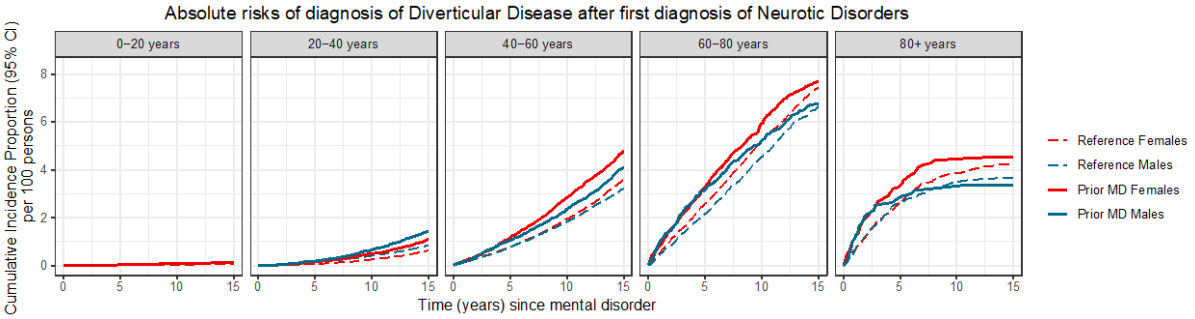


Figure S137.17 – Chronic Kidney Disease

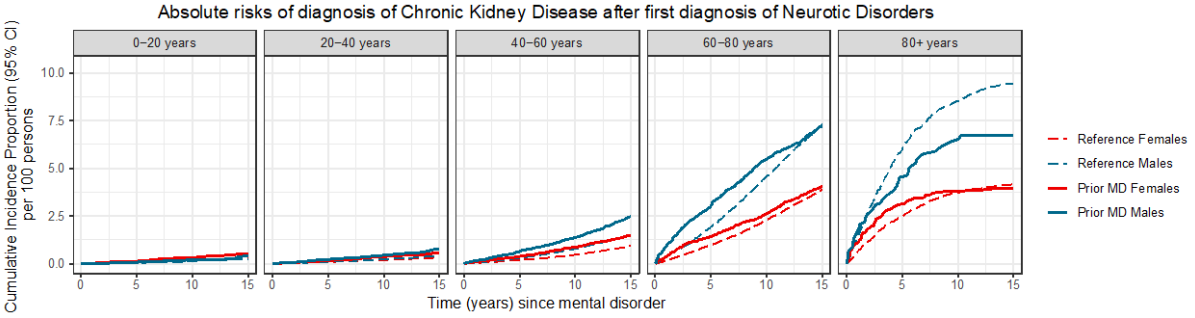


Figure S137.18 – Prostate Disorders

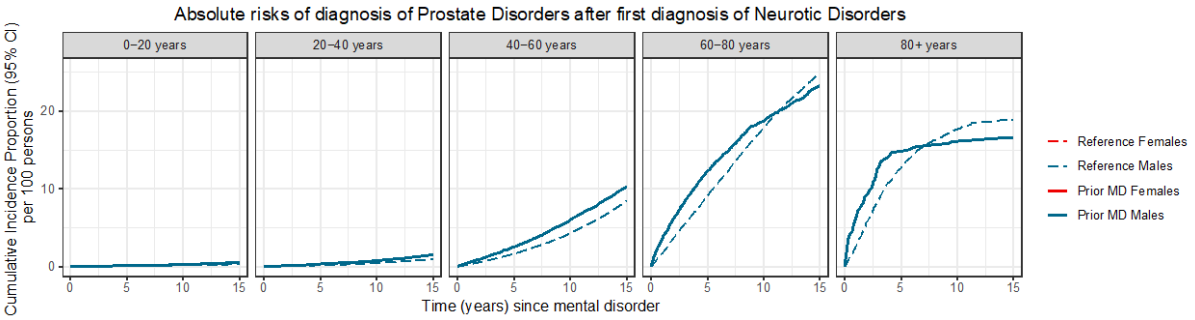


Figure S137.19 – Connective Tissue Disorders

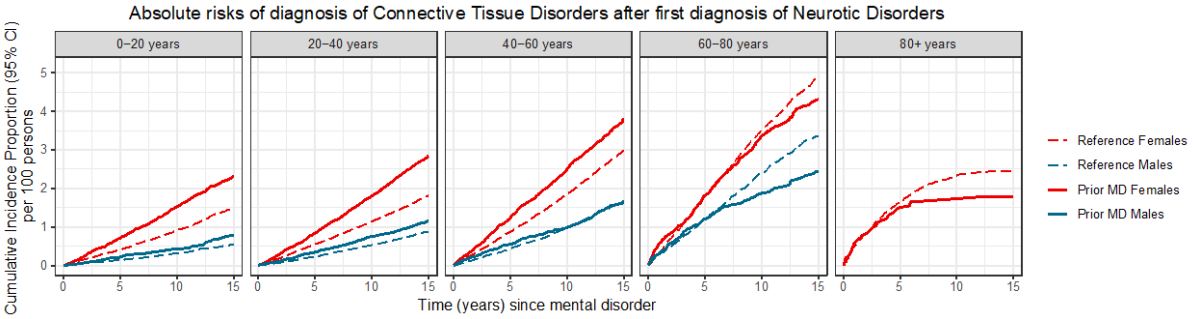


Figure S137.20 – Osteoporosis

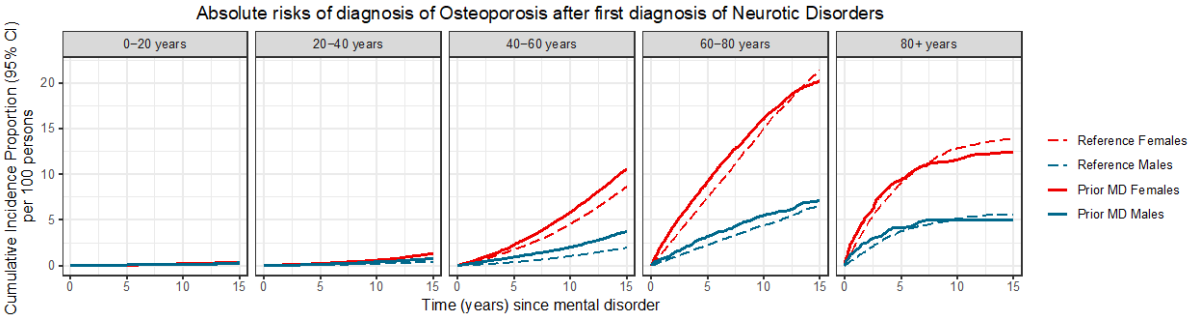


Figure S137.21 – Painful Conditions

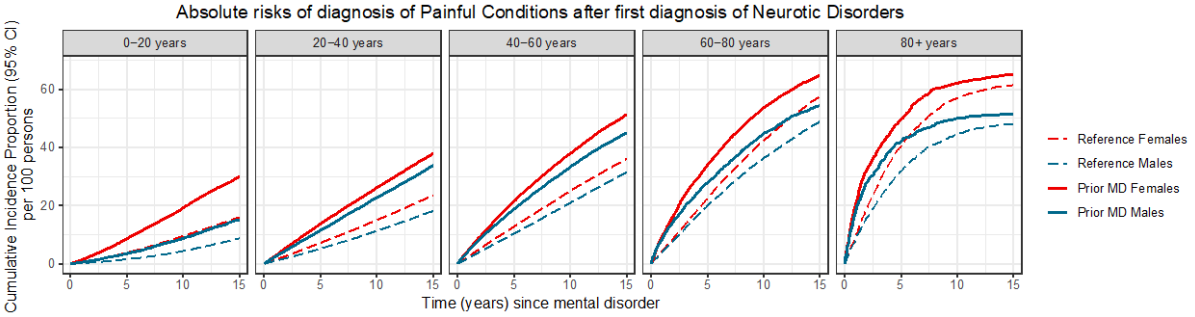


Figure S137.22 – HIV/AIDS

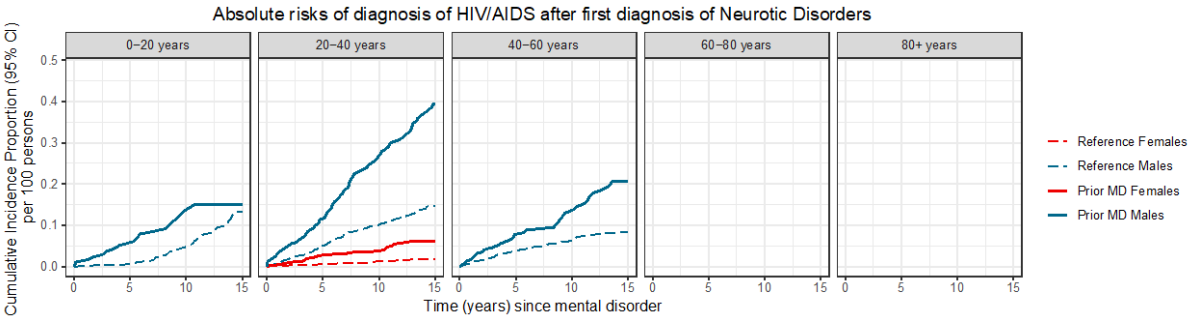


Figure S137.23 – Anemias

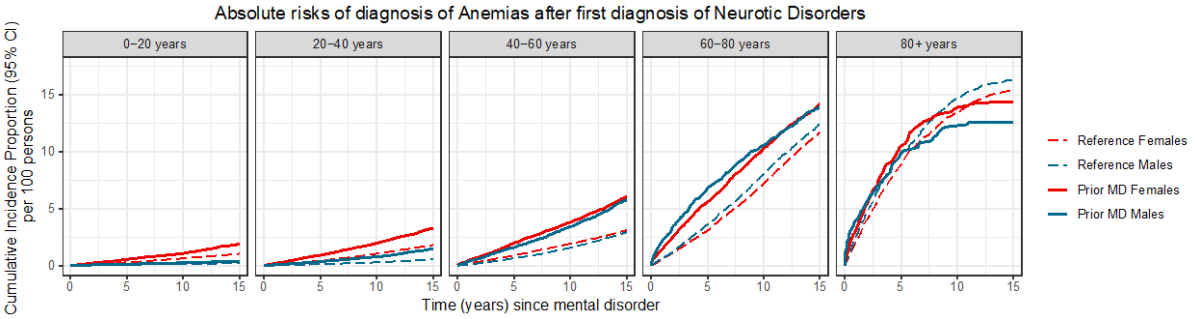


Figure S137.24 – Cancer

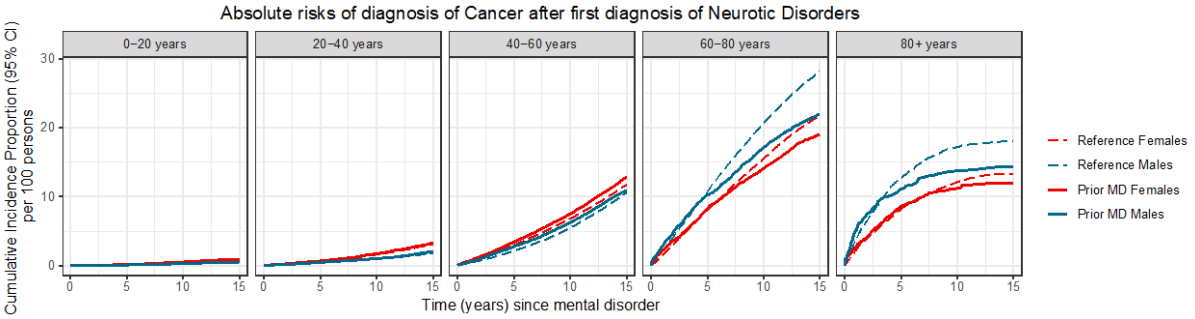


Figure S137.25 – Vision Problems

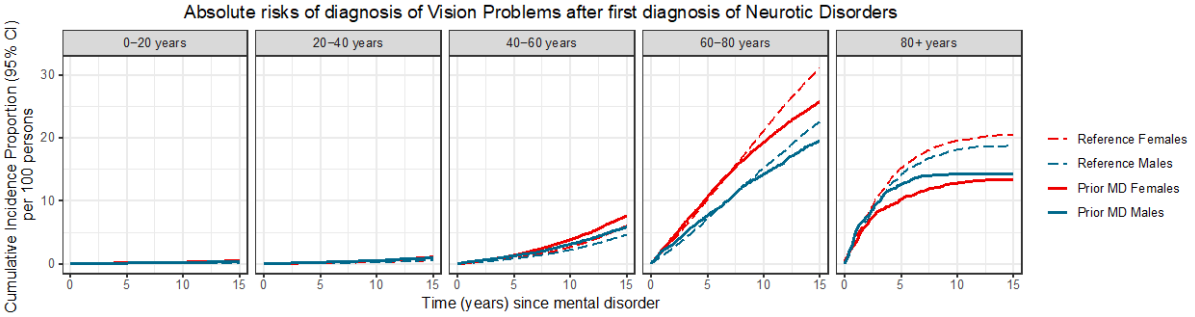


Figure S137.26 – Hearing Problems

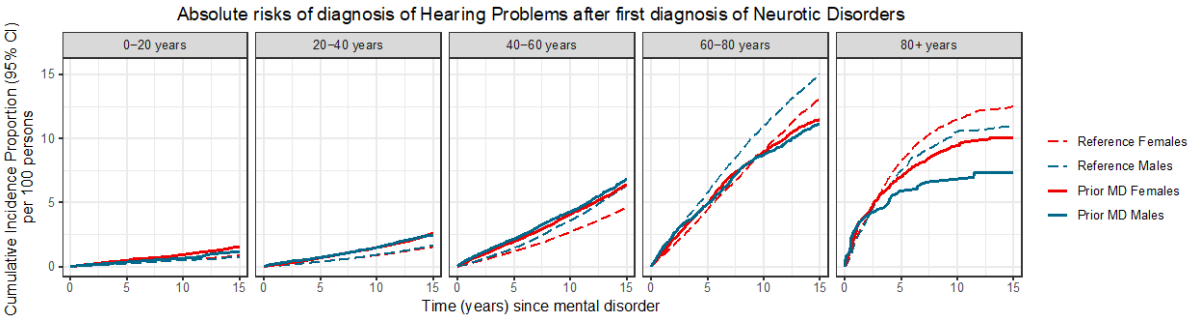


Figure S137.27 – Migraine

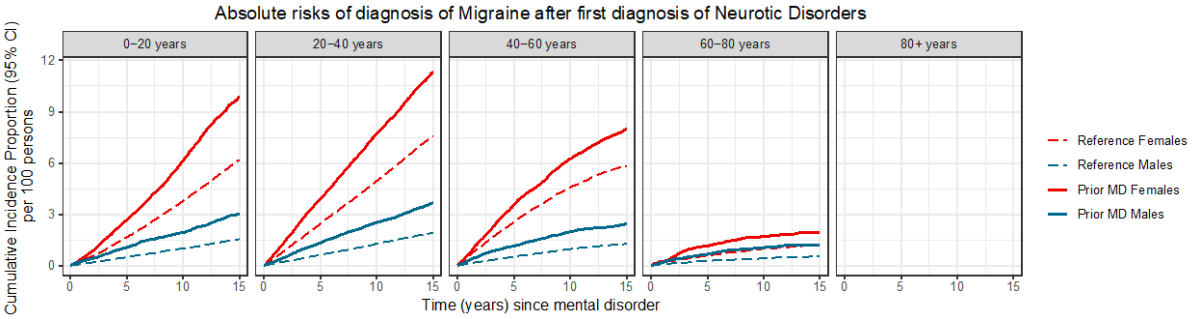


Figure S137.28 – Epilepsy

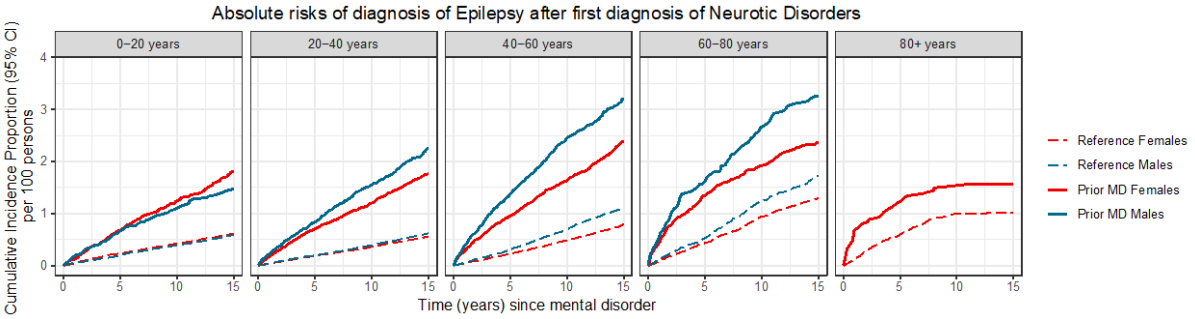


Figure S137.29 – Parkinson's Disease

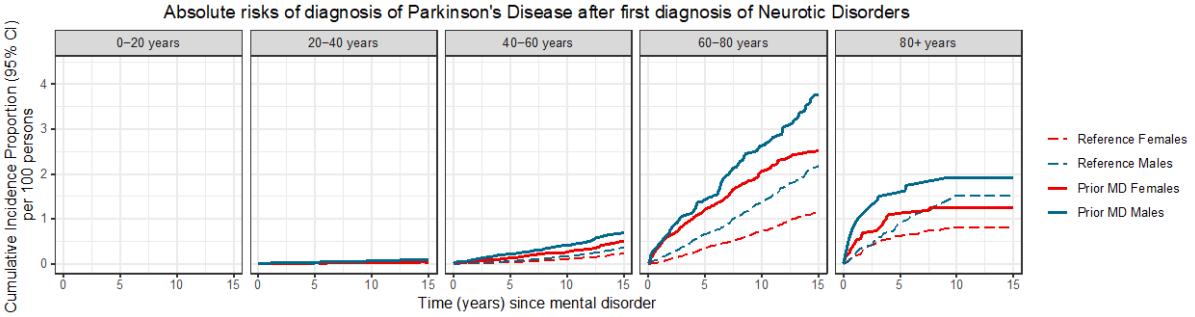


Figure S137.30 – Multiple Sclerosis

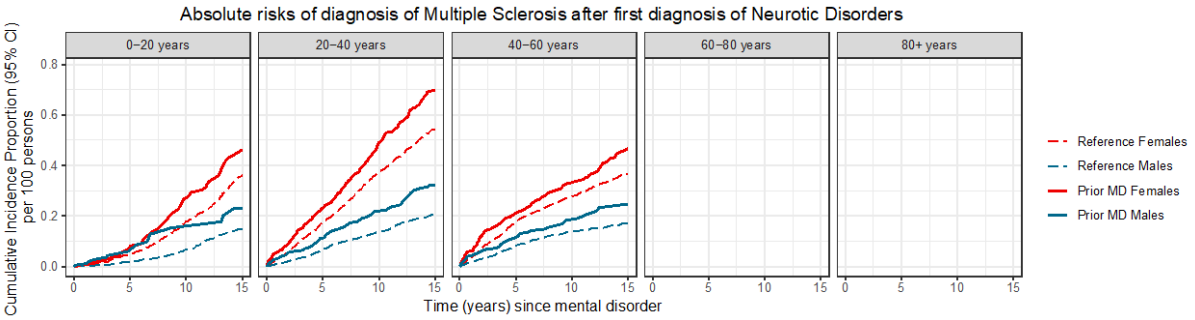
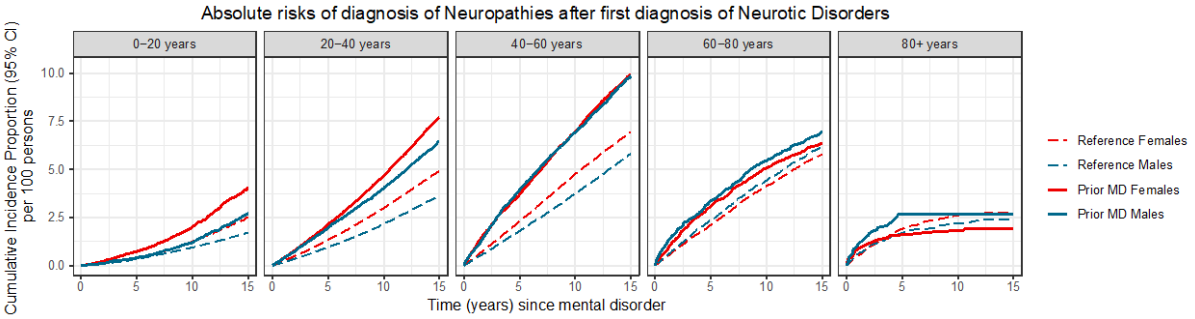


Figure S137.31 – Neuropathies



Figures S138.1-S138.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Eating Disorders

Figure S138.1 – Hypertension

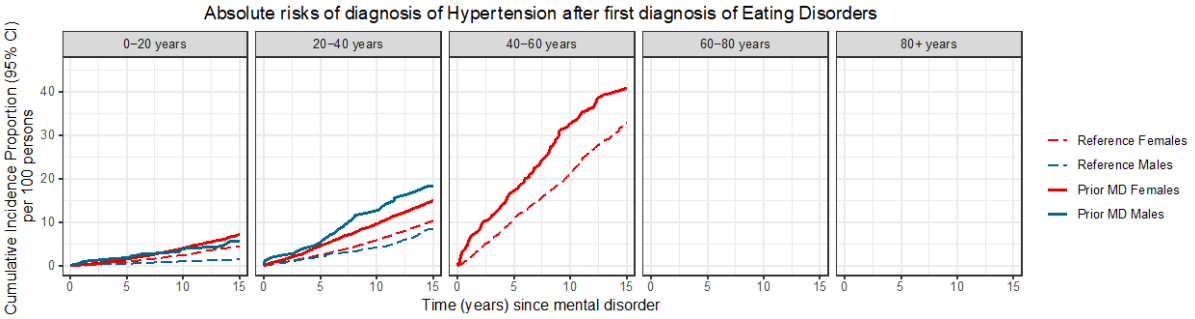


Figure S138.2 – Dyslipidemia

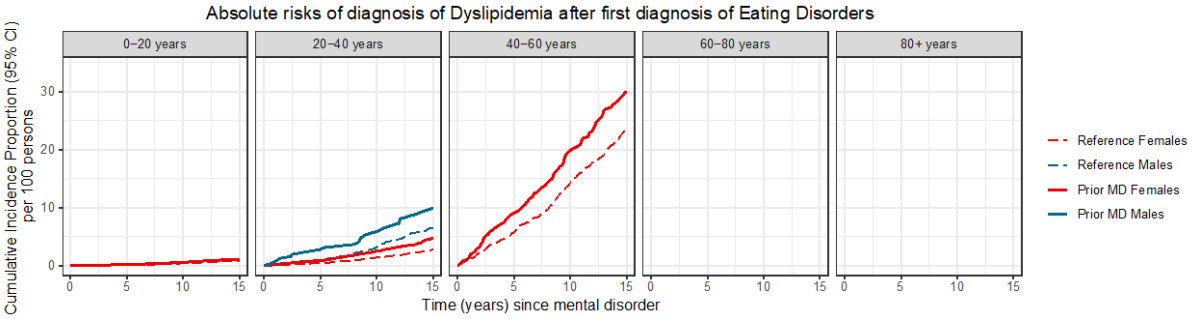


Figure S138.3 – Ischemic Heart Disease

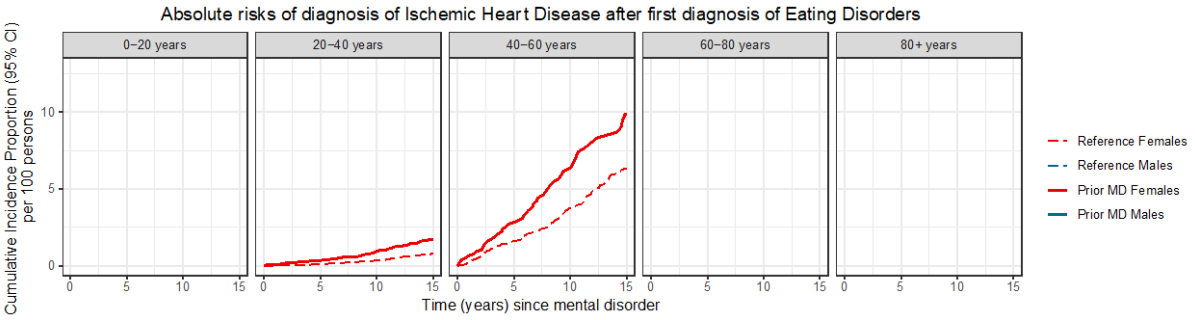


Figure S138.4 – Atrial Fibrillation

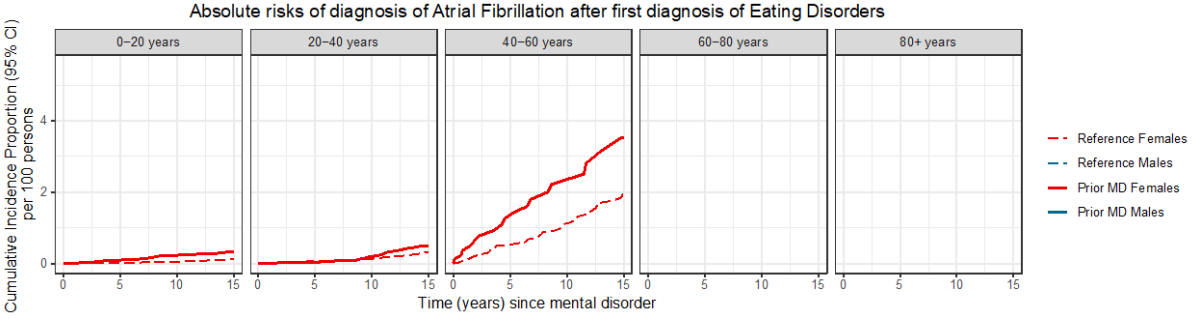


Figure S138.5 – Heart Failure

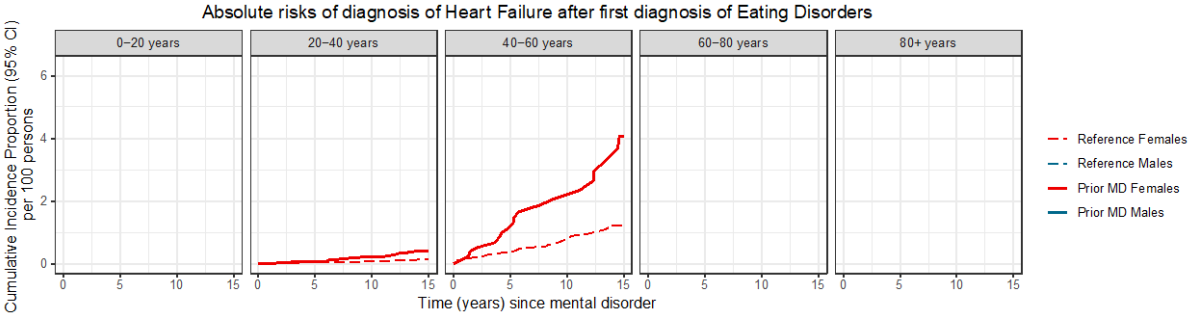


Figure S138.6 – Peripheral Artery Occlusive Disease

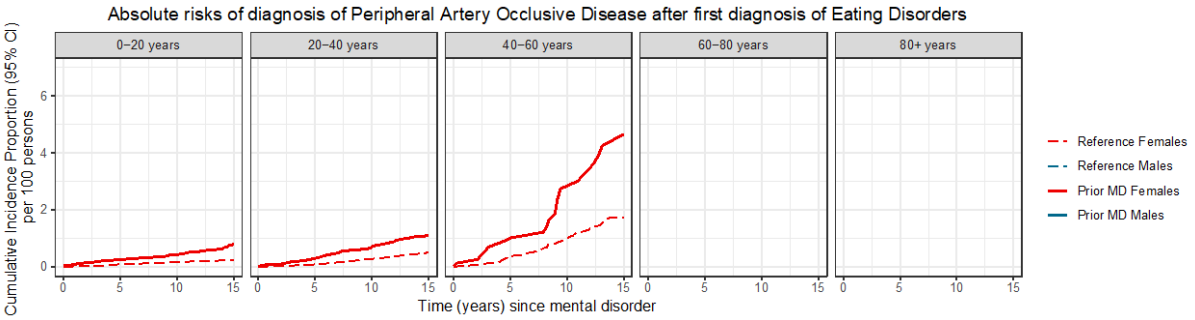


Figure S138.7 – Stroke

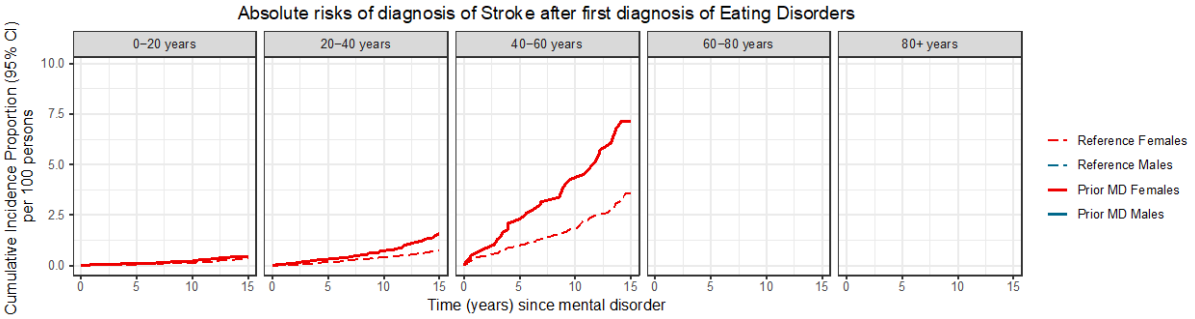


Figure S138.8 – Diabetes Mellitus

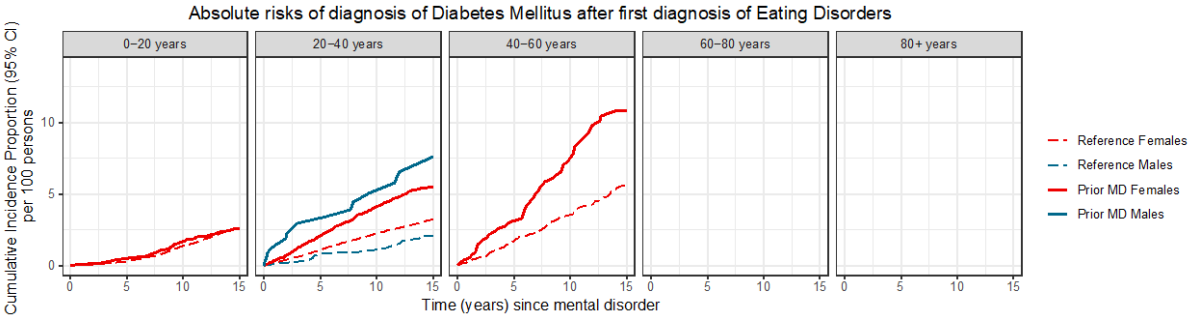


Figure S138.9 – Thyroid Disorders

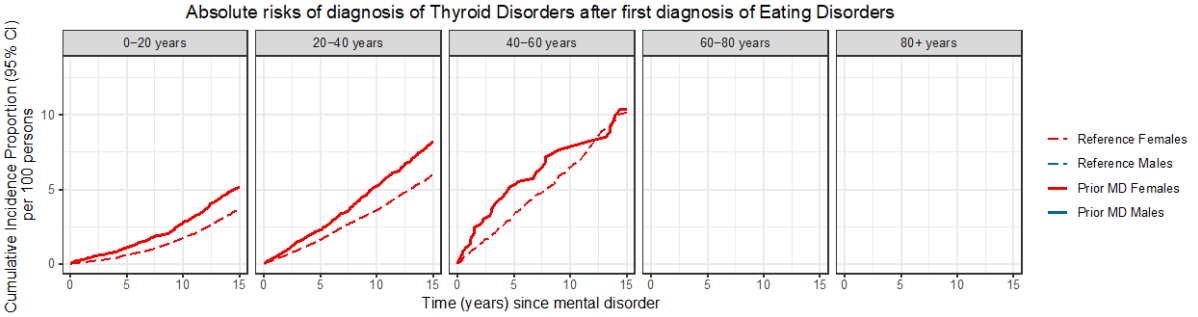


Figure S138.10 – Gout

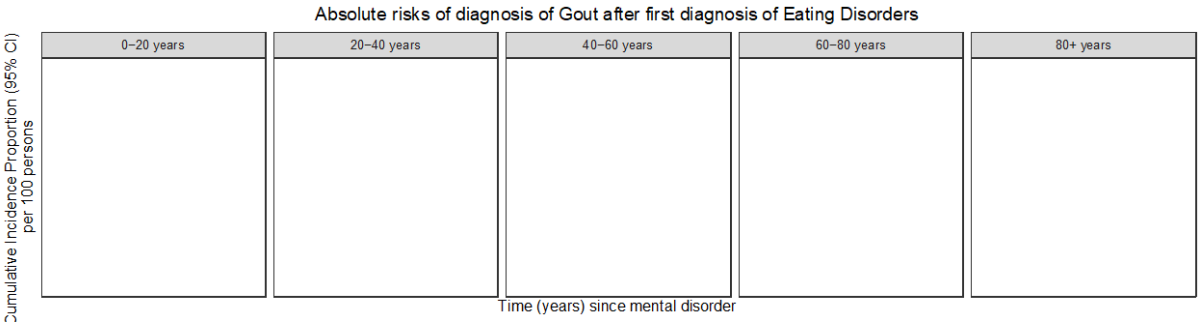


Figure S138.11 – Chronic Pulmonary Disease

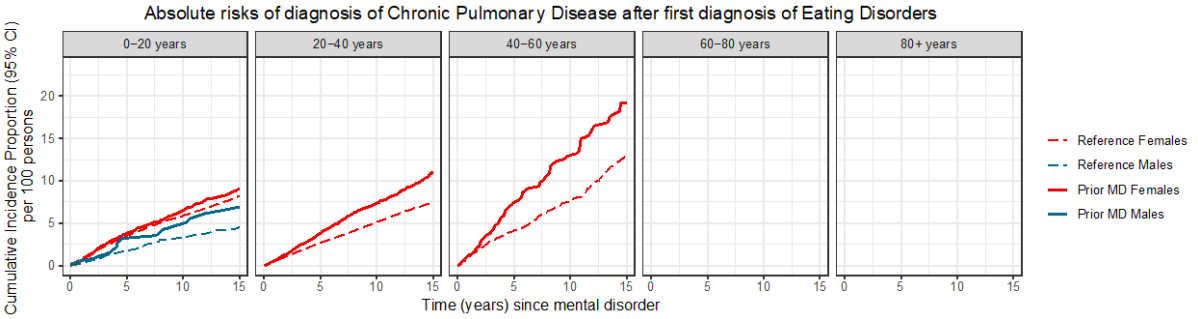


Figure S138.12 – Allergy

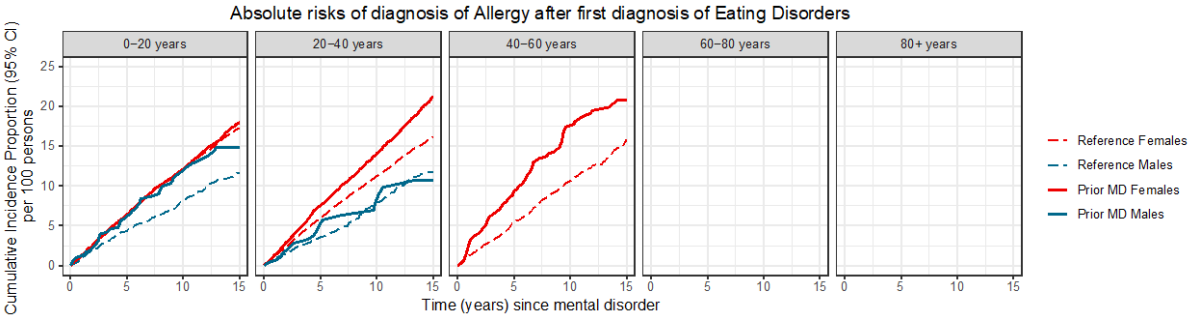


Figure S138.13 – Ulcer/Chronic Gastritis

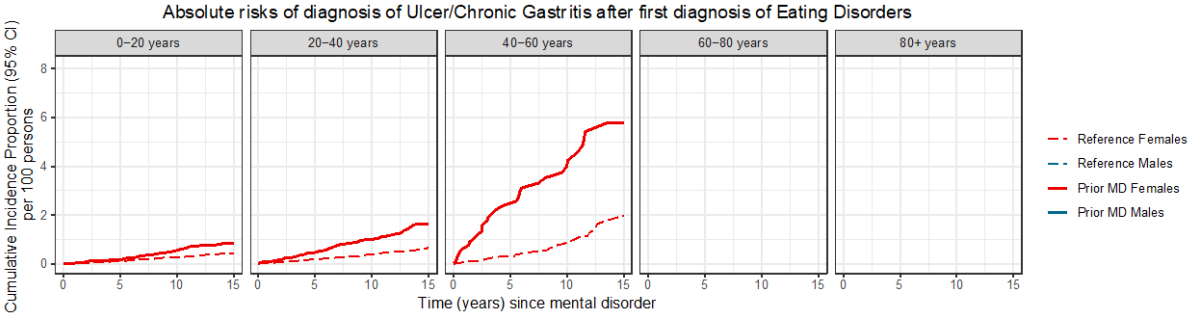


Figure S138.14 – Chronic Liver Disease

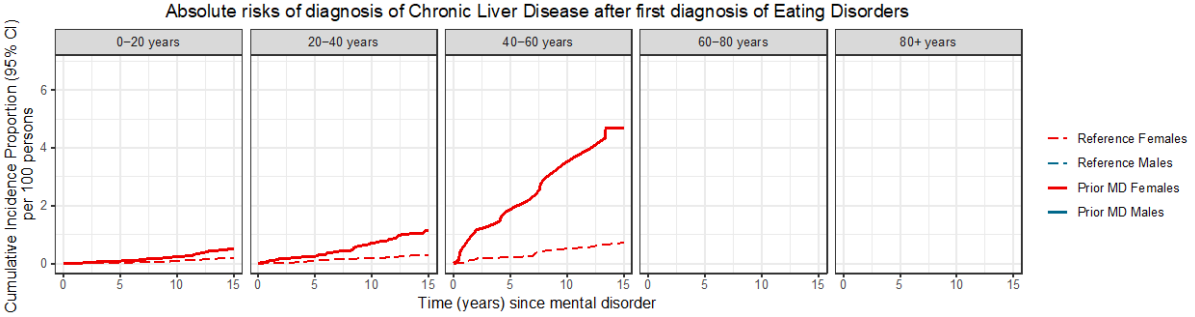


Figure S138.15 – Inflammatory Bowel Disease

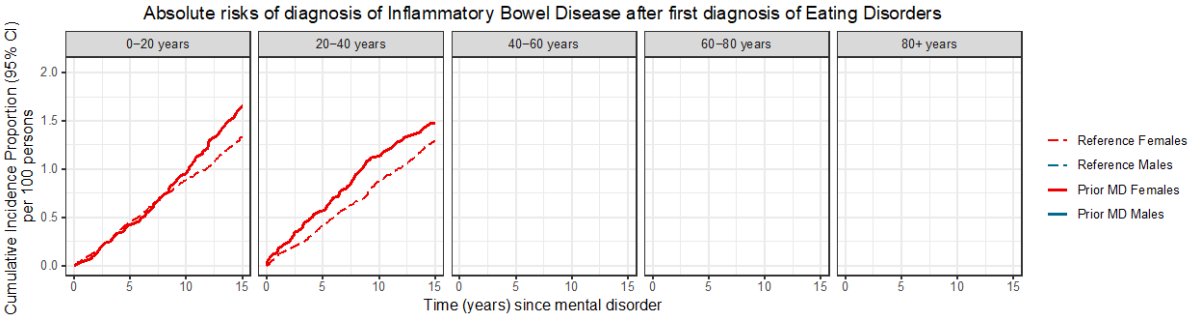


Figure S138.16 – Diverticular Disease of the Intestine

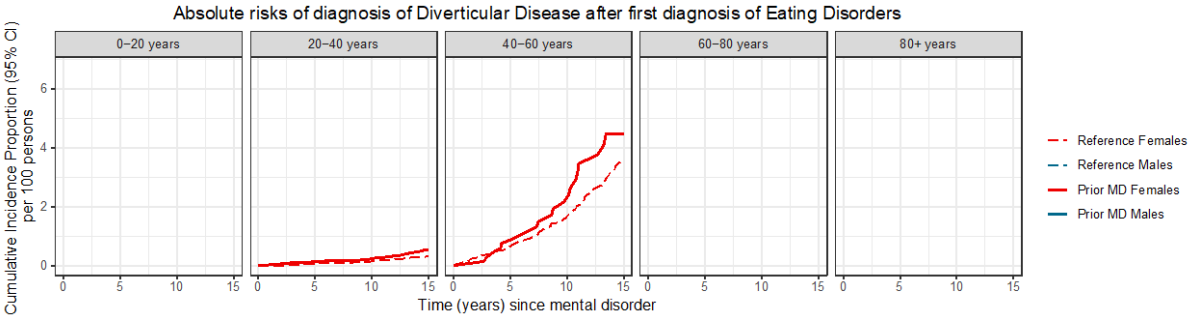


Figure S138.17 – Chronic Kidney Disease

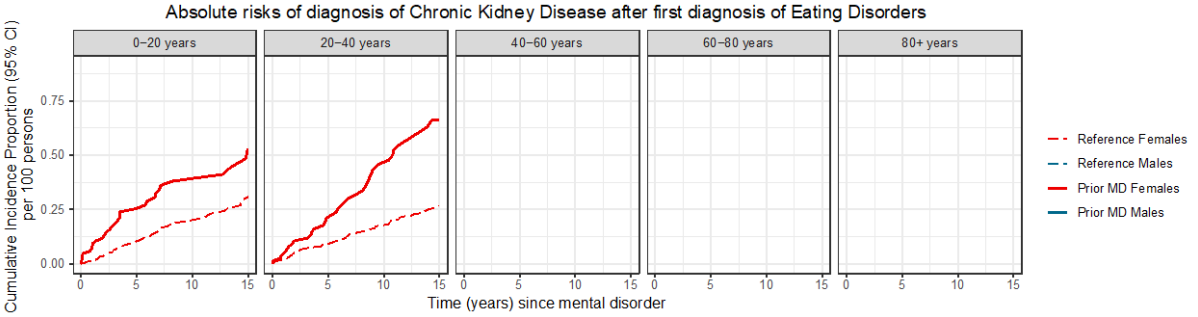


Figure S138.18 – Prostate Disorders

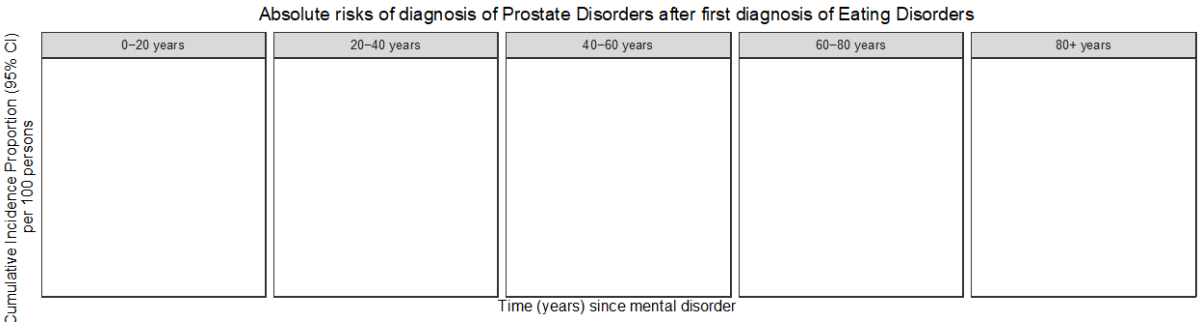


Figure S138.19 – Connective Tissue Disorders

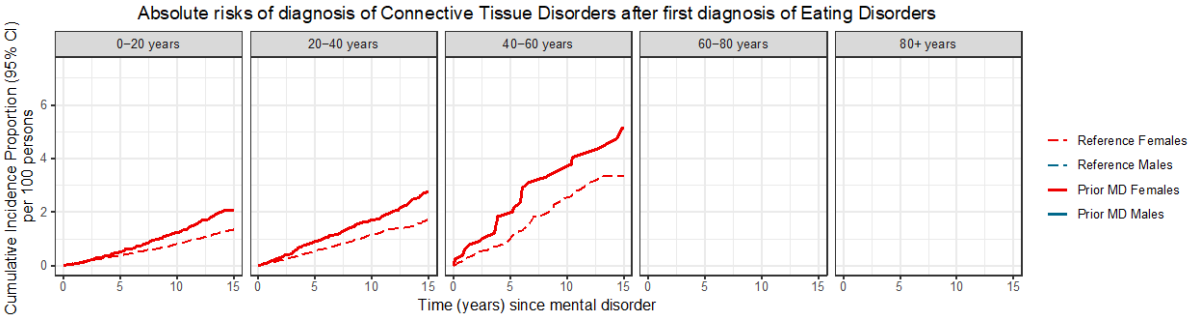


Figure S138.20 – Osteoporosis

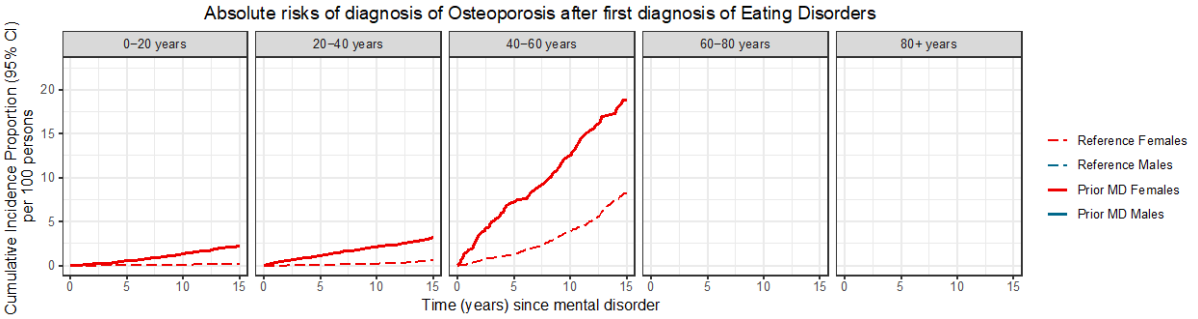


Figure S138.21 – Painful Conditions

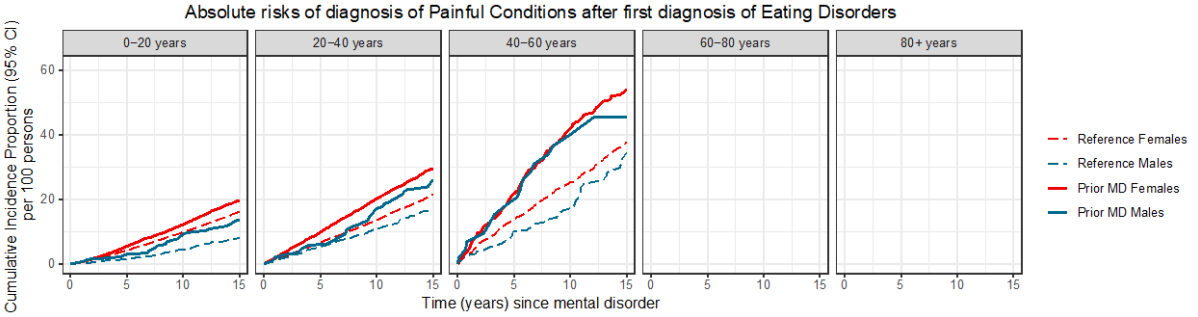


Figure S138.22 – HIV/AIDS

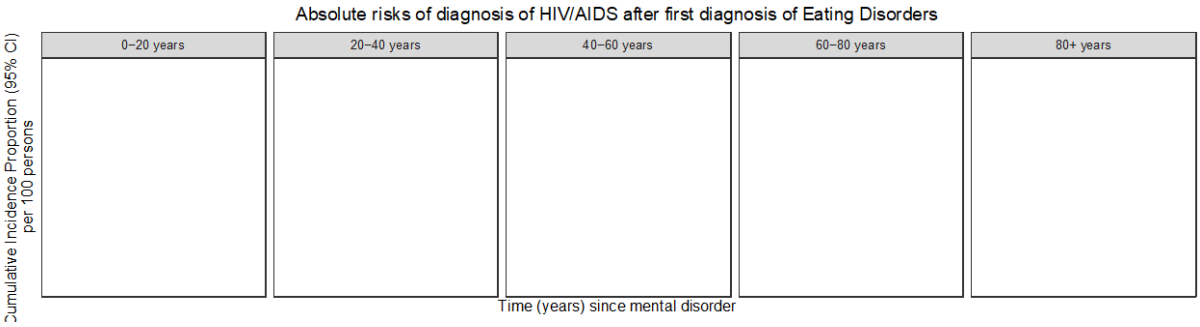


Figure S138.23 – Anemias

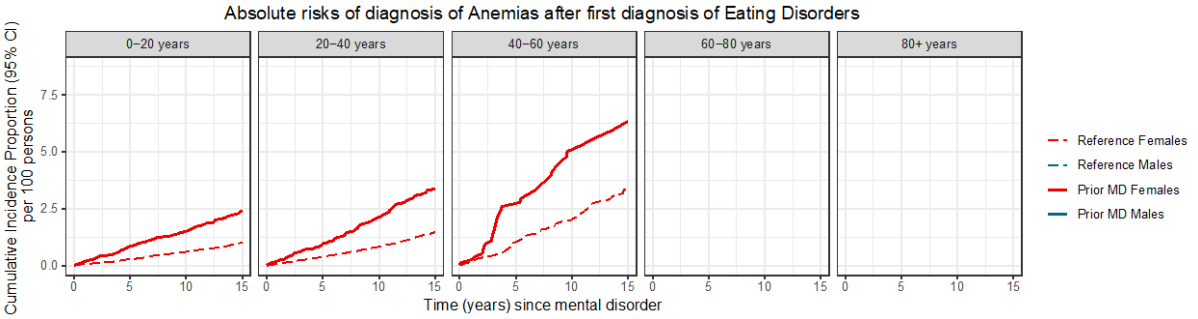


Figure S138.24 – Cancer

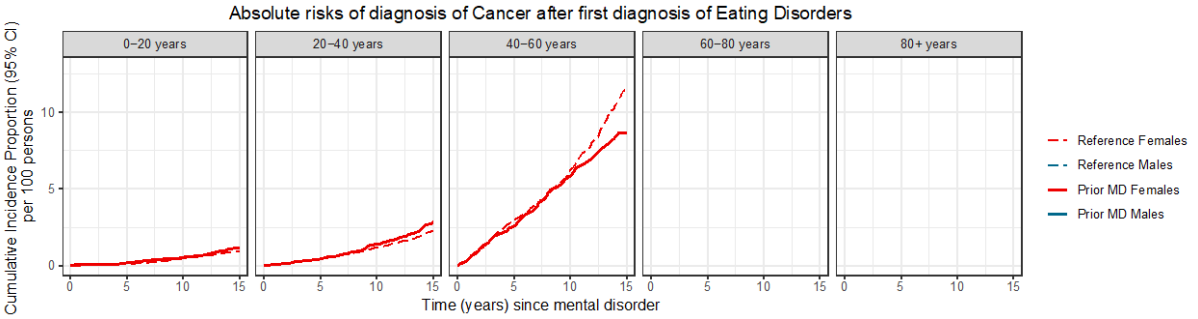


Figure S138.25 – Vision Problems

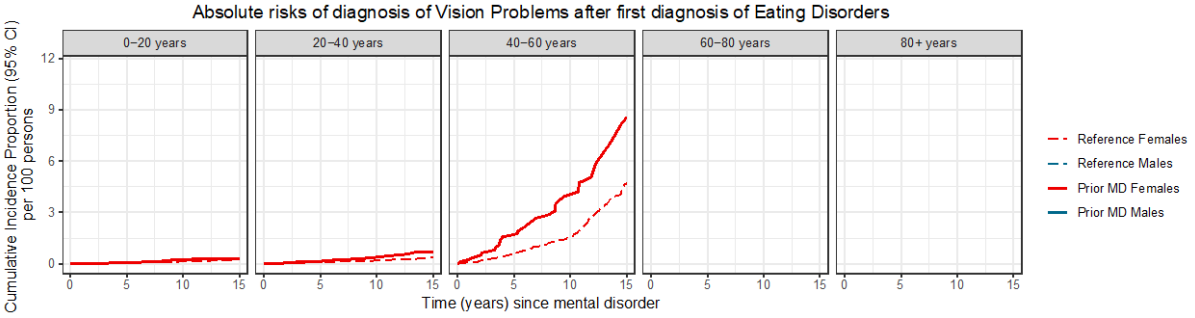


Figure S138.26 – Hearing Problems

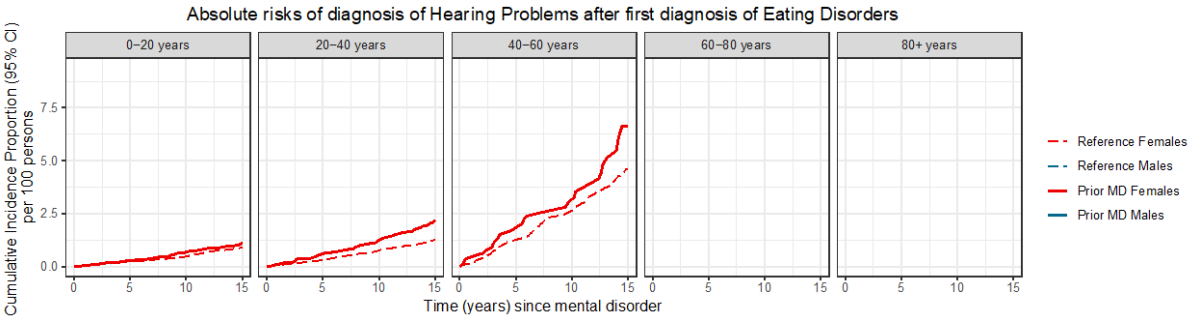


Figure S138.27 – Migraine

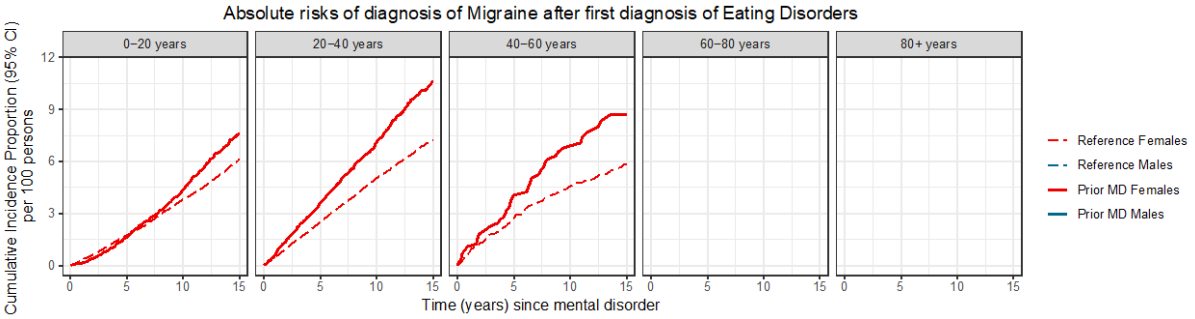


Figure S138.28 – Epilepsy

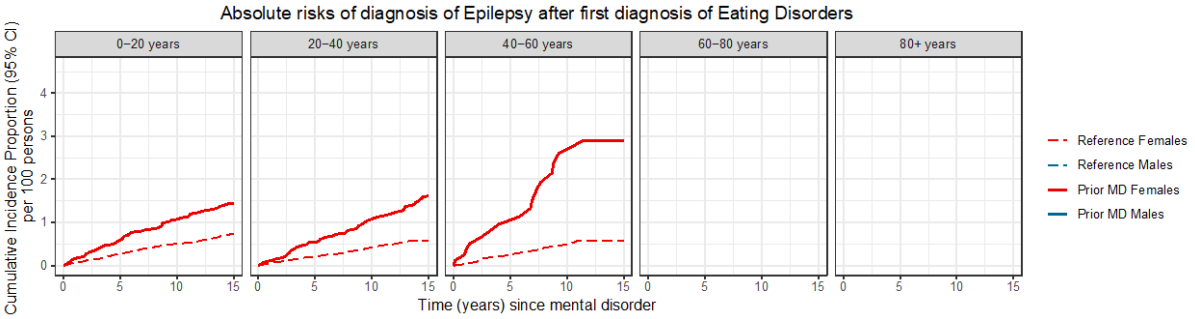


Figure S138.29 – Parkinson's Disease

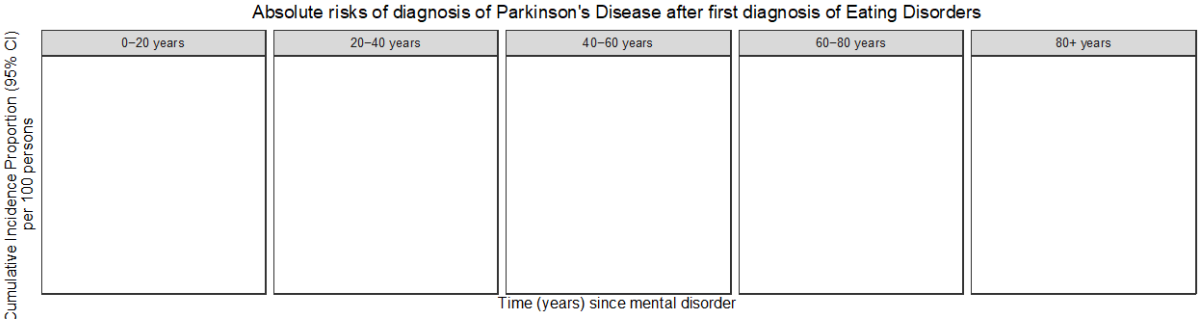


Figure S138.30 – Multiple Sclerosis

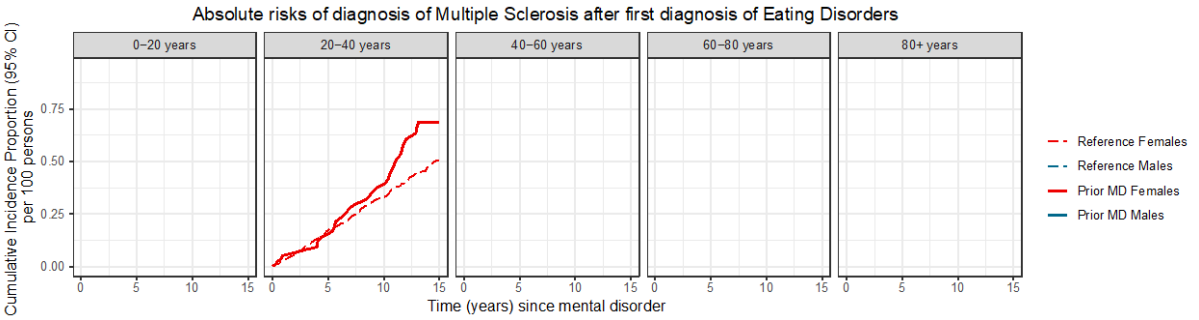
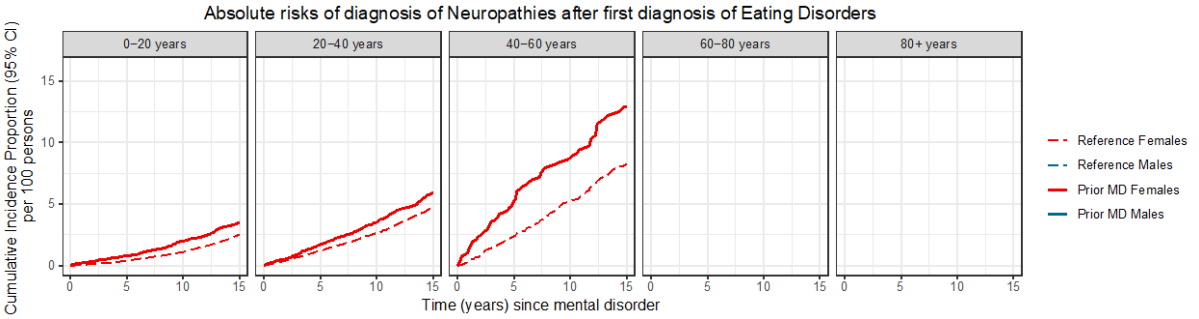


Figure S138.31 – Neuropathies



Figures S139.1-S139.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Personality Disorders

Figure S139.1 – Hypertension

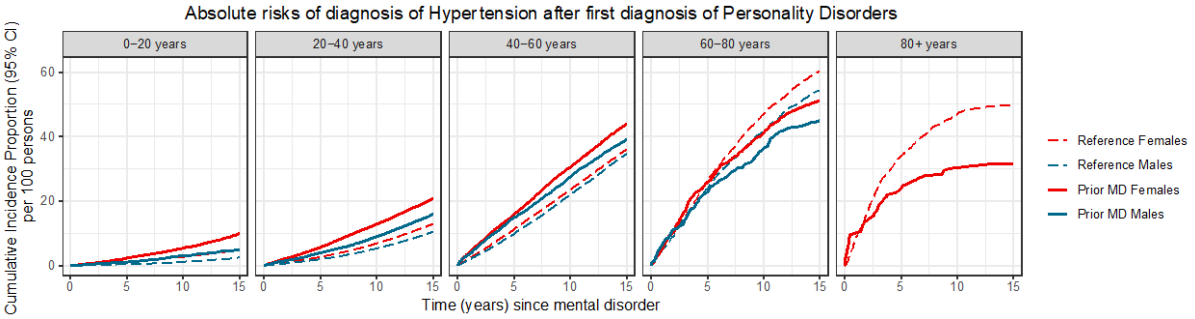


Figure S139.2 – Dyslipidemia

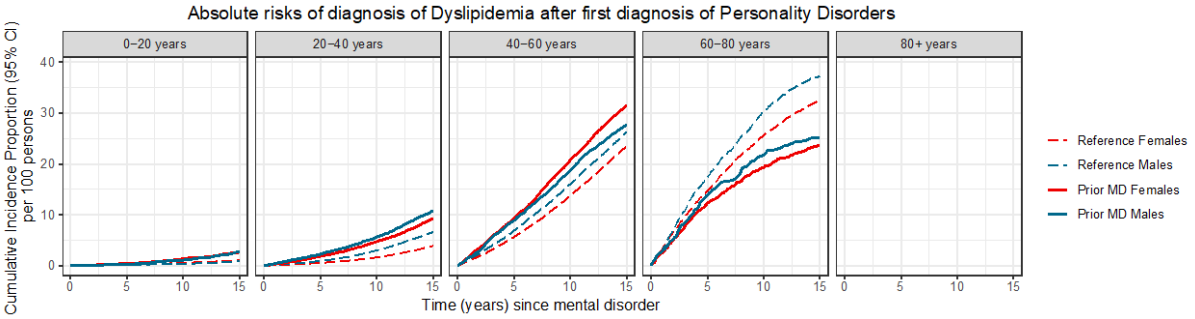


Figure S139.3 – Ischemic Heart Disease

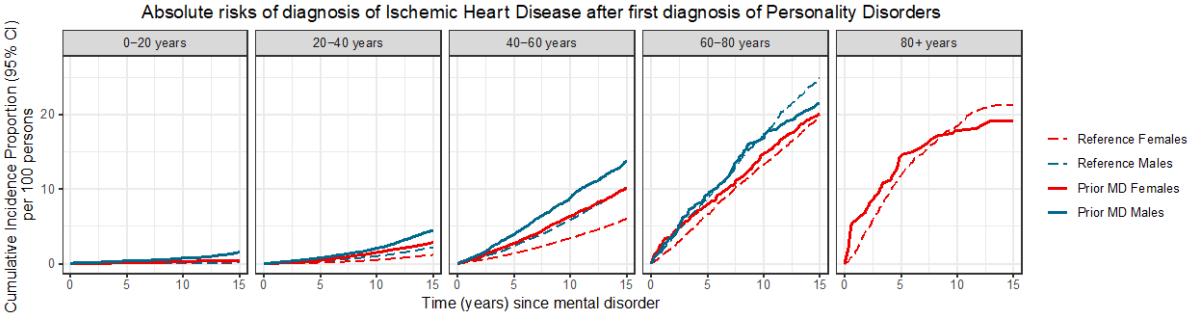


Figure S139.4 – Atrial Fibrillation

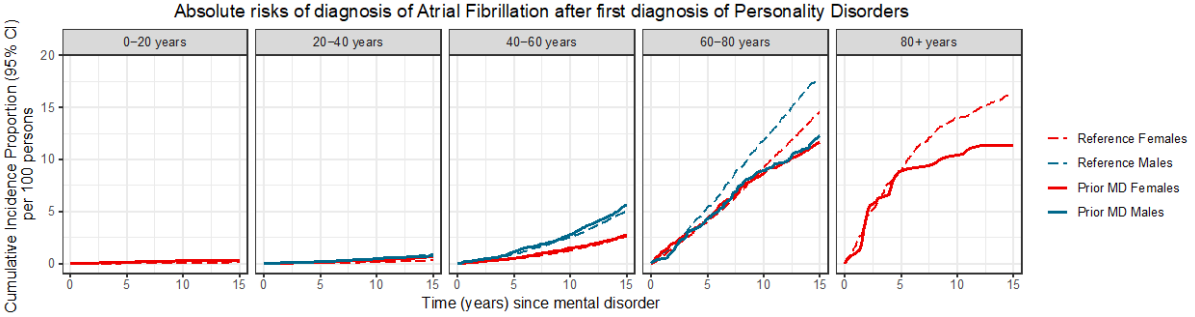


Figure S139.5 – Heart Failure

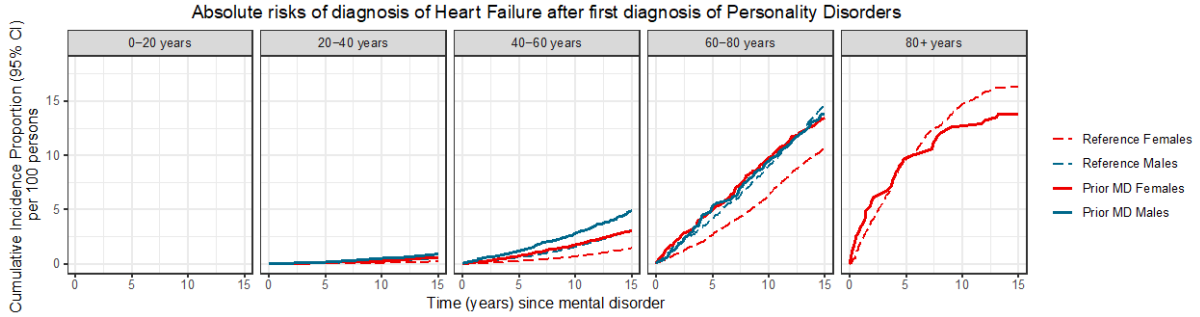


Figure S139.6 – Peripheral Artery Occlusive Disease

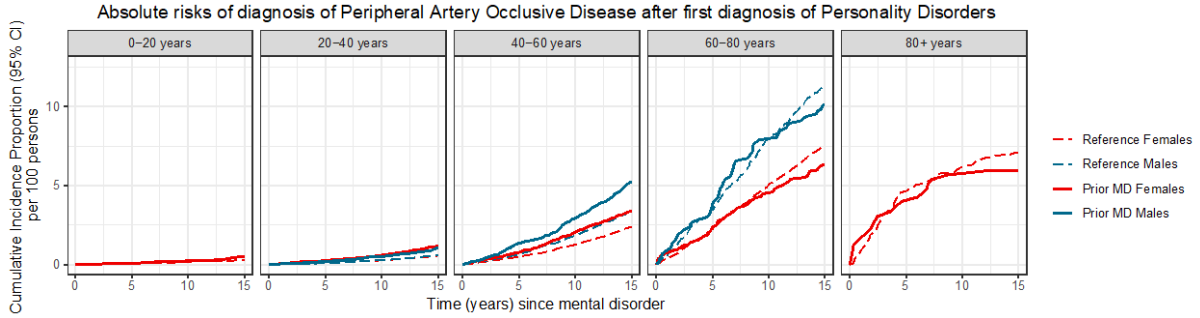


Figure S139.7 – Stroke

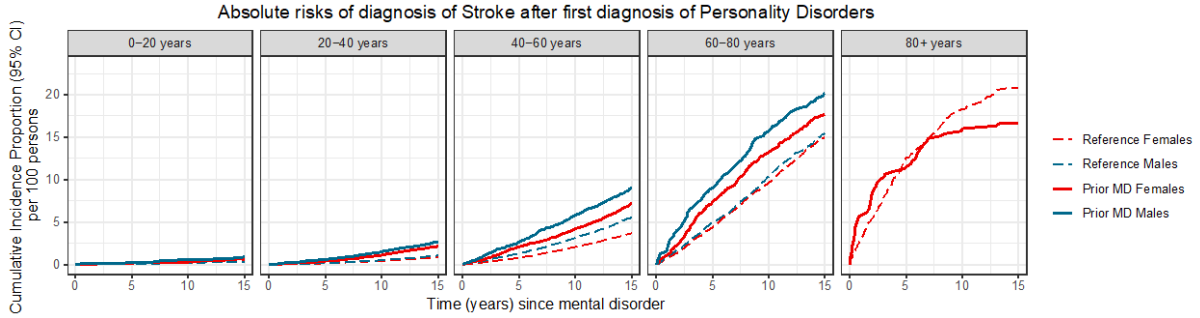


Figure S139.8 – Diabetes Mellitus

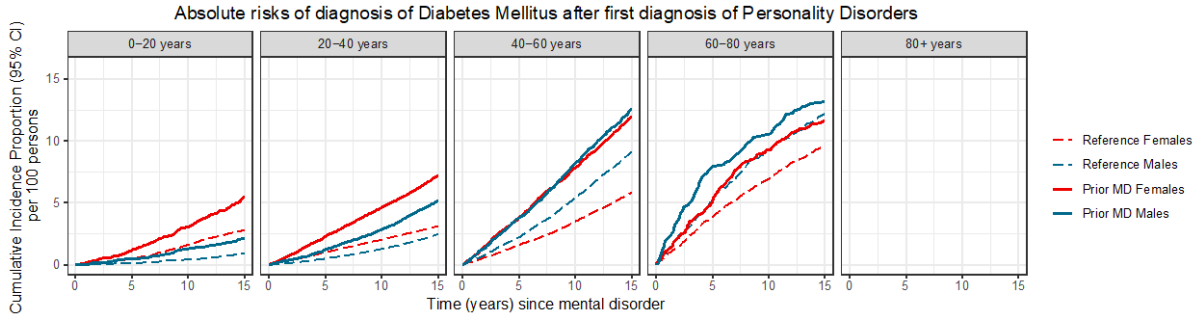


Figure S139.9 – Thyroid Disorders

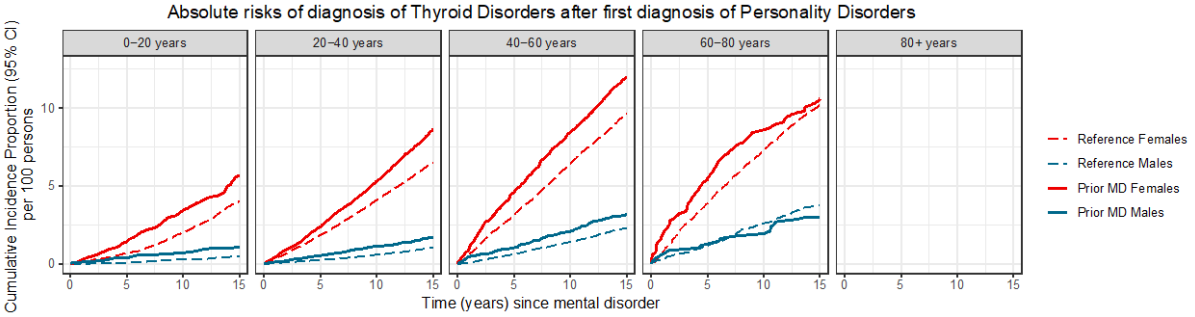


Figure S139.10 – Gout

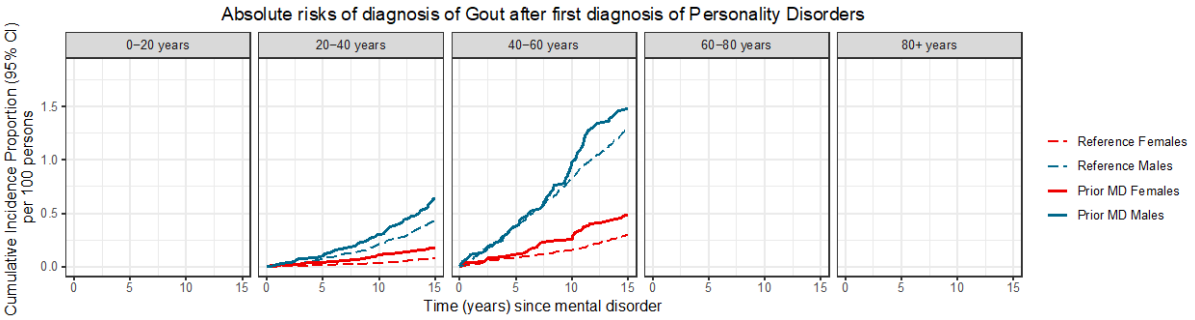


Figure S139.11 – Chronic Pulmonary Disease

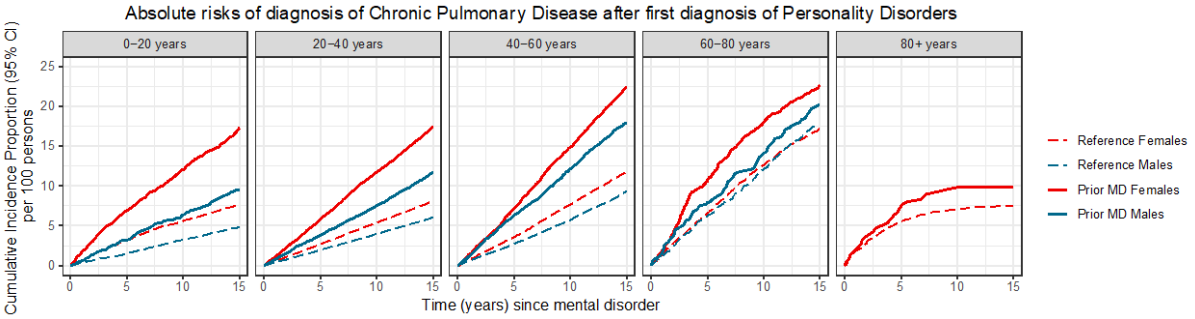


Figure S139.12 – Allergy

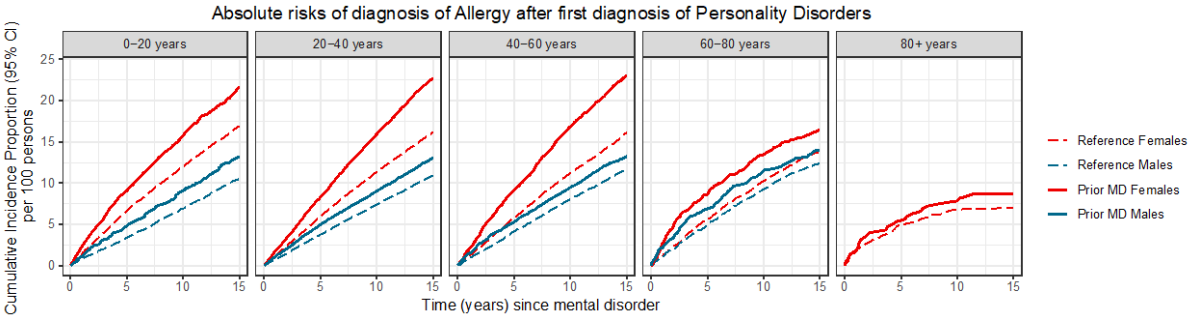


Figure S139.13 – Ulcer/Chronic Gastritis

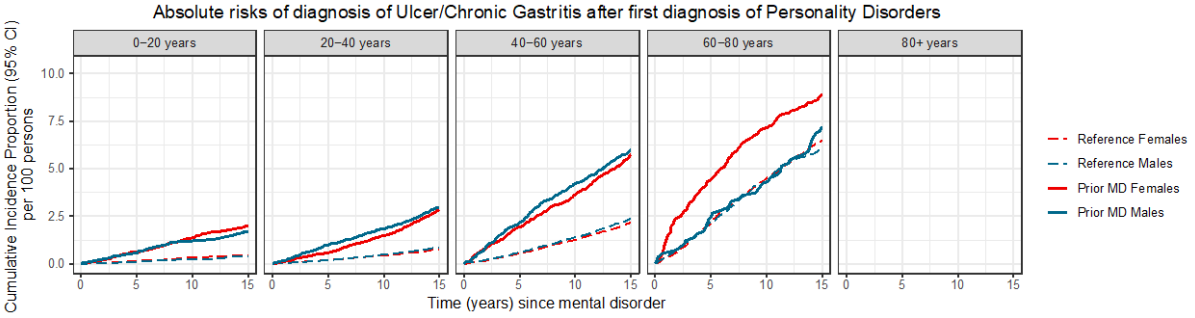


Figure S139.14 – Chronic Liver Disease

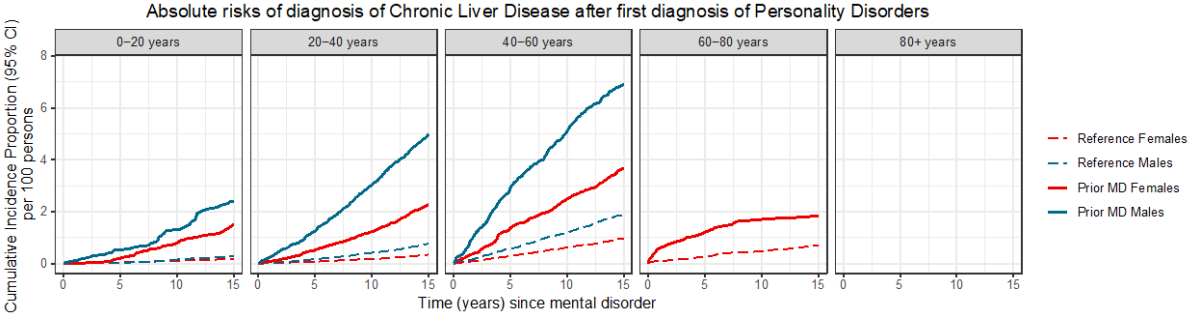


Figure S139.15 – Inflammatory Bowel Disease

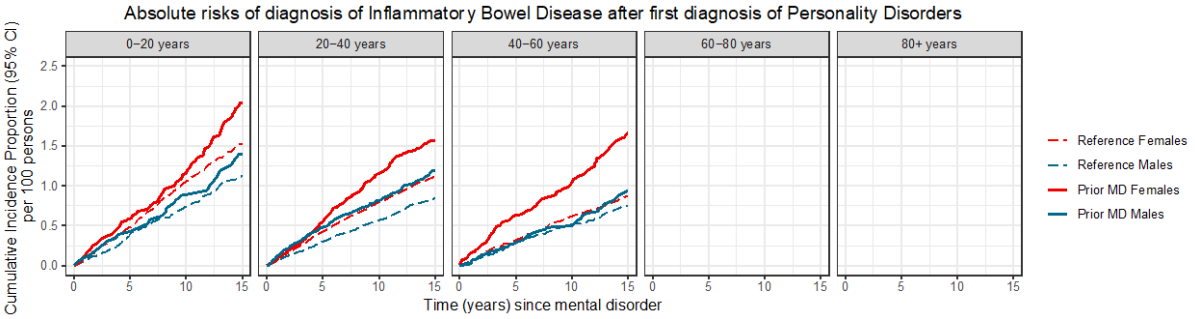


Figure S139.16 – Diverticular Disease of the Intestine

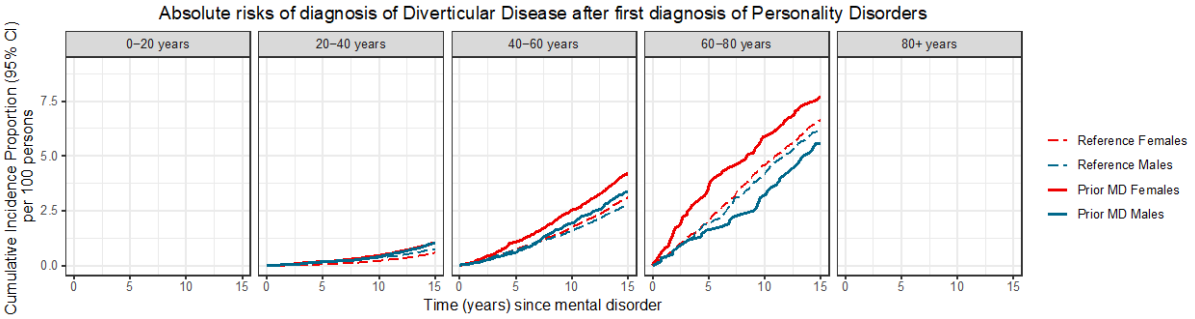


Figure S139.17 – Chronic Kidney Disease

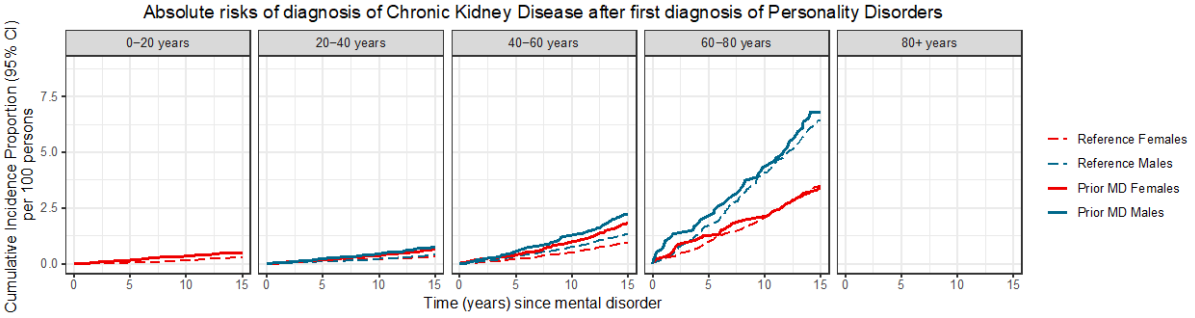


Figure S139.18 – Prostate Disorders

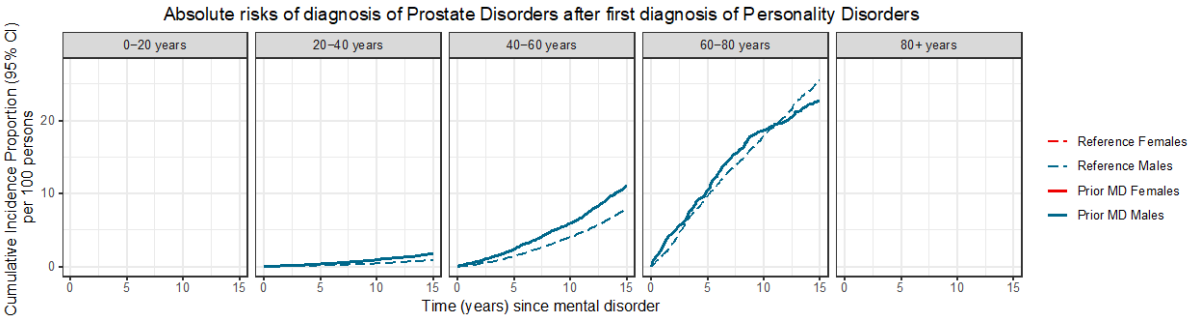


Figure S139.19 – Connective Tissue Disorders

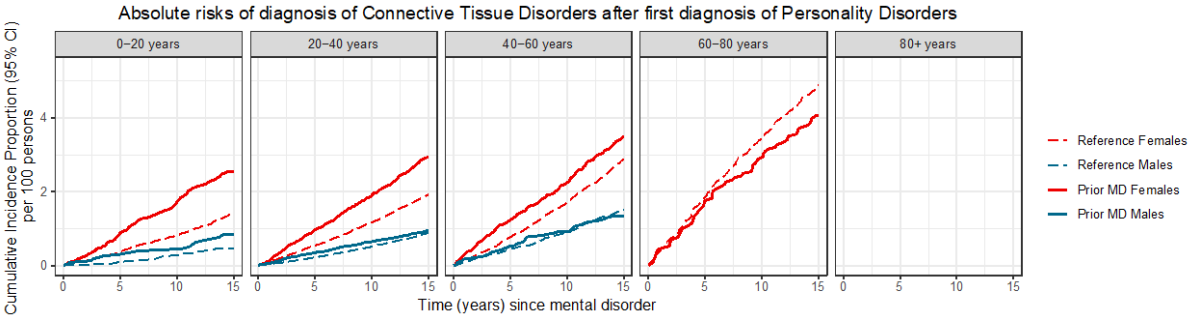


Figure S139.20 – Osteoporosis

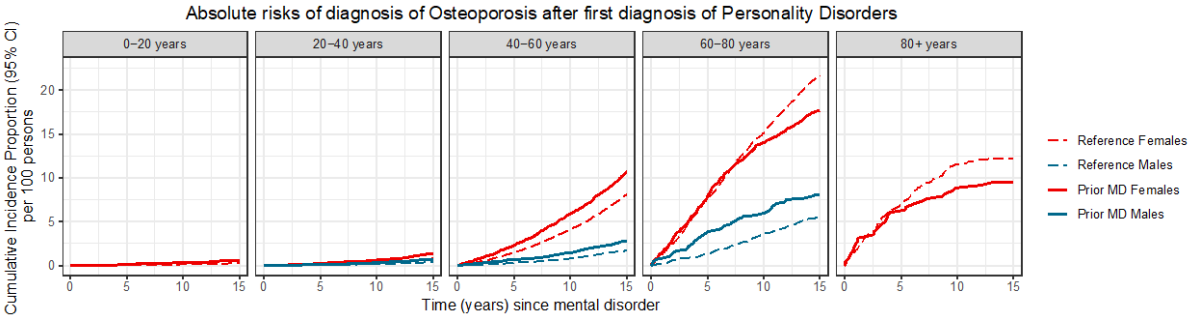


Figure S139.21 – Painful Conditions

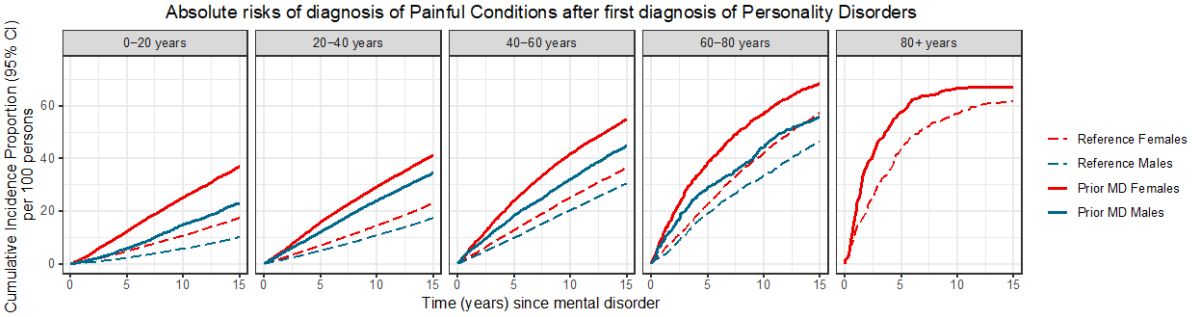


Figure S139.22 – HIV/AIDS

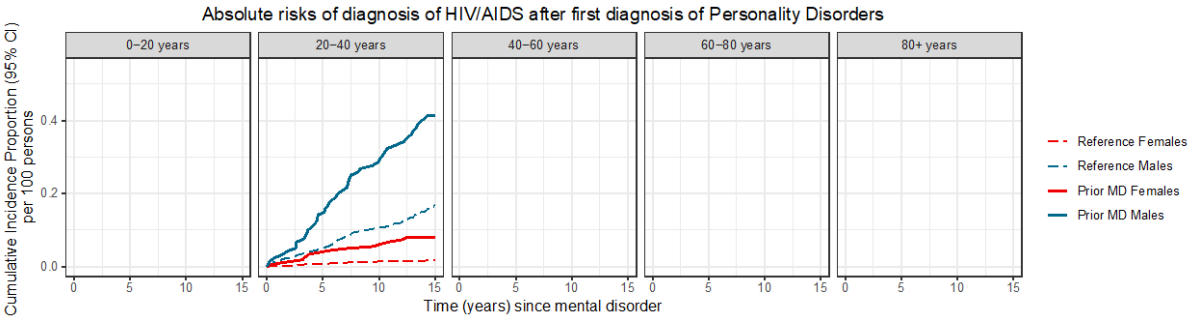


Figure S139.23 – Anemias

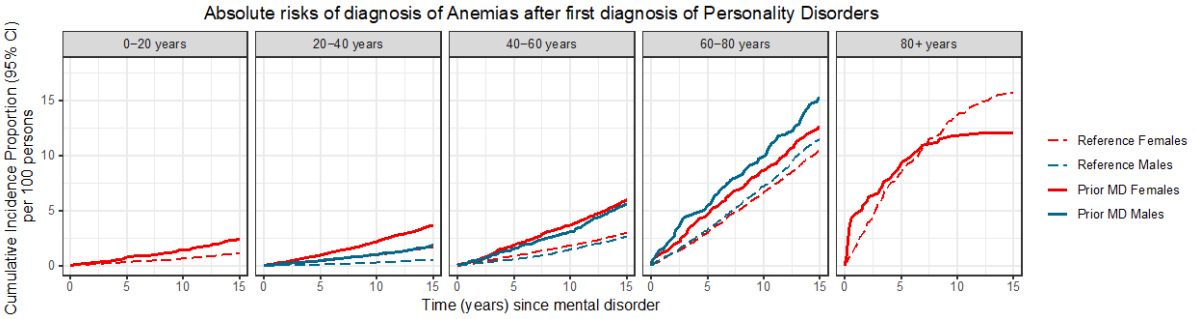


Figure S139.24 – Cancer

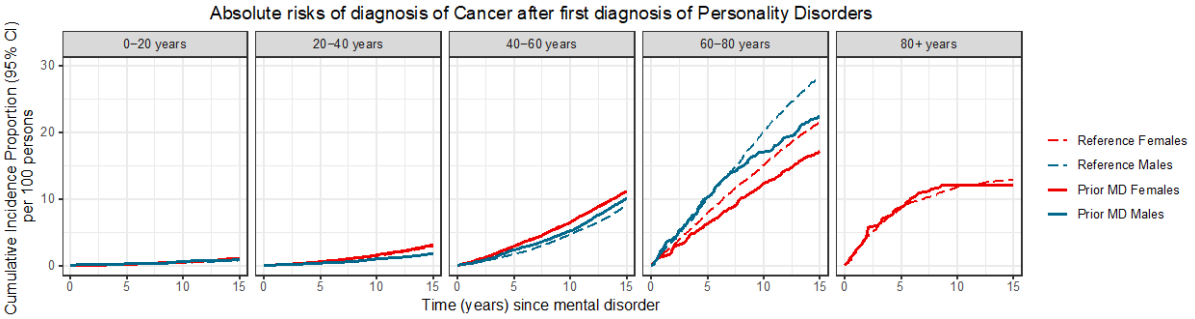


Figure S139.25 – Vision Problems

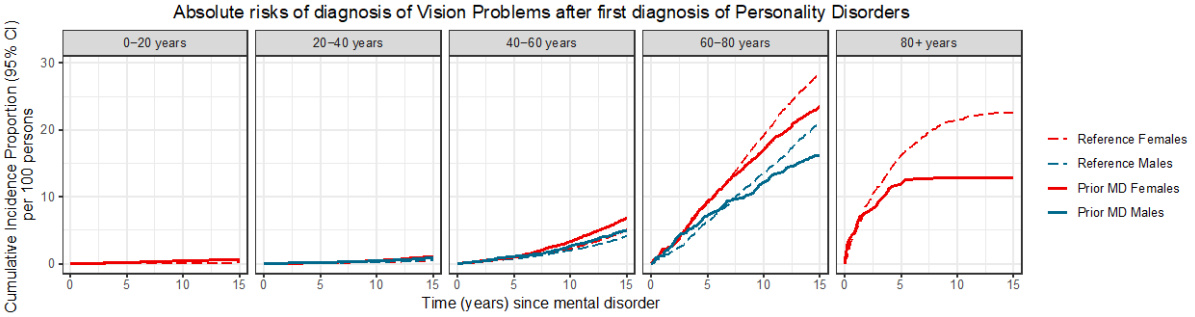


Figure S139.26 – Hearing Problems

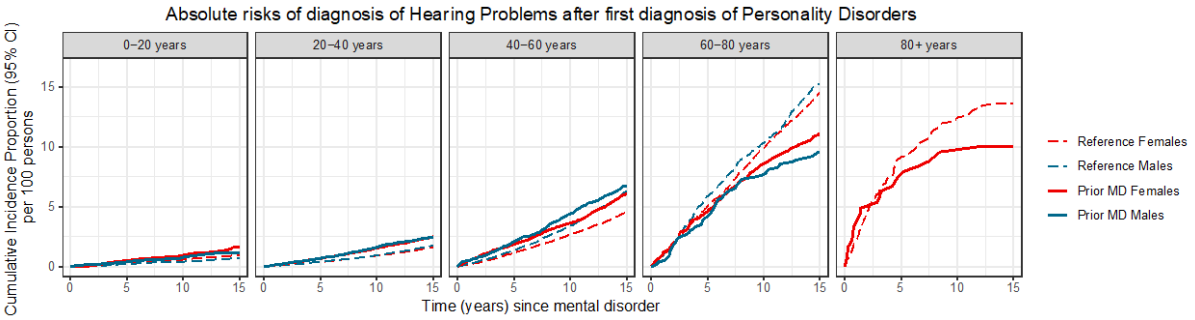


Figure S139.27 – Migraine

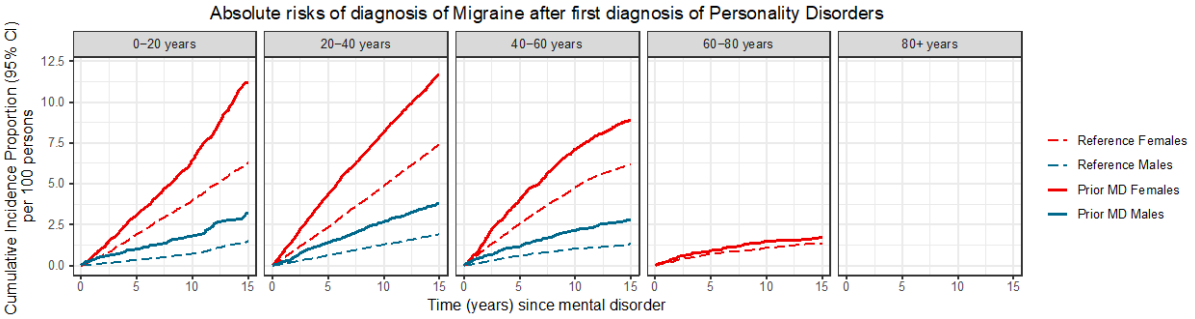


Figure S139.28 – Epilepsy

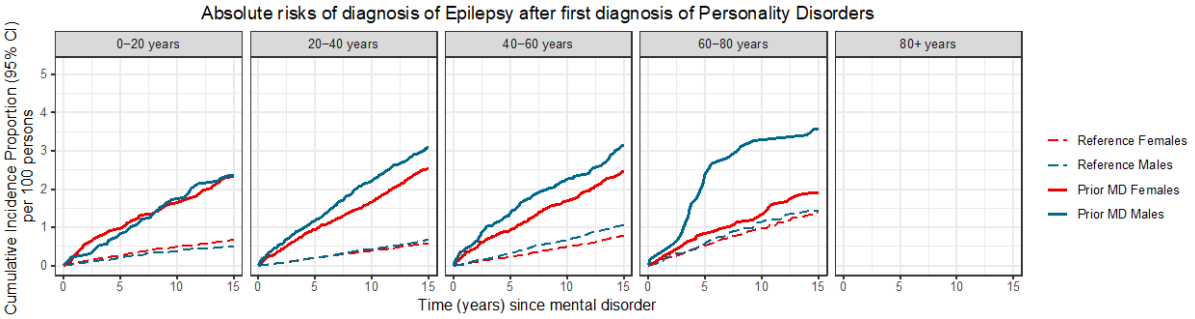


Figure S139.29 – Parkinson's Disease

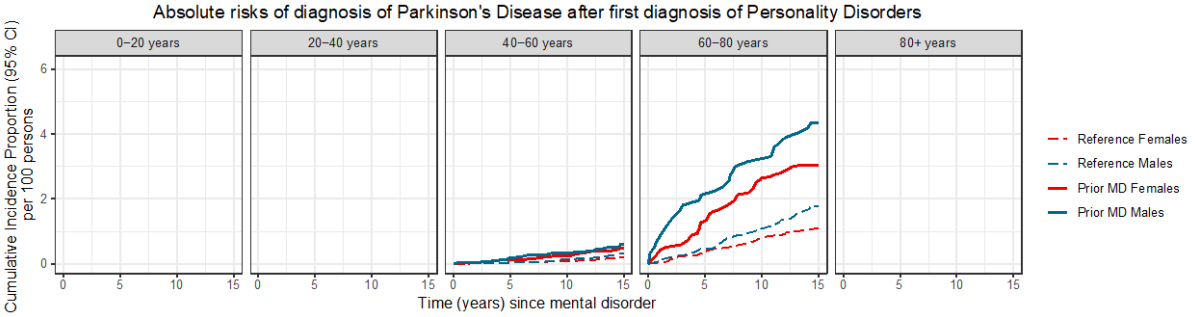


Figure S139.30 – Multiple Sclerosis

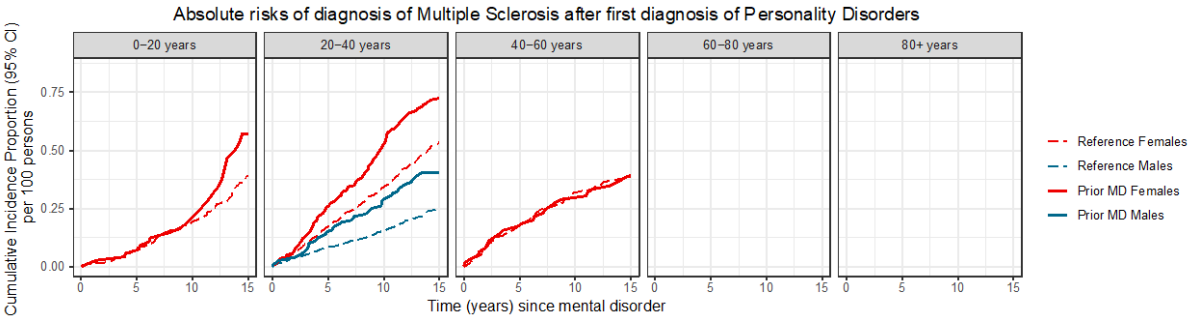
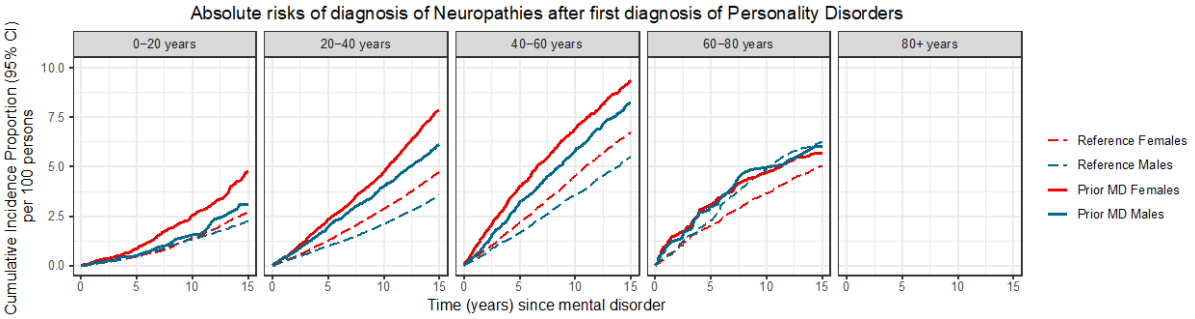


Figure S139.31 – Neuropathies



Figures S140.1-S140.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Intellectual Disabilities

Figure S140.1 - Hypertension

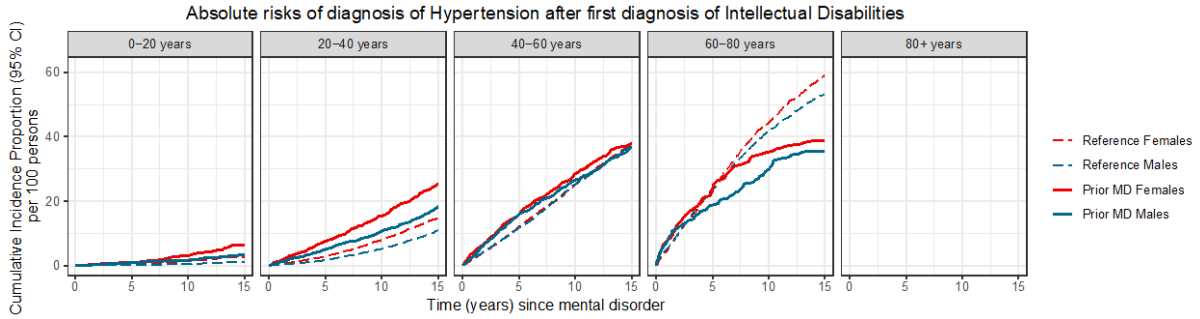


Figure S140.2 – Dyslipidemia

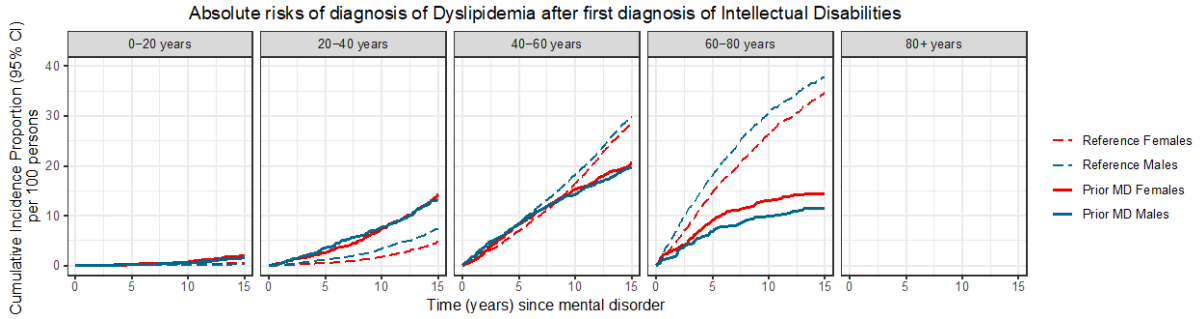


Figure S140.3 – Ischemic Heart Disease

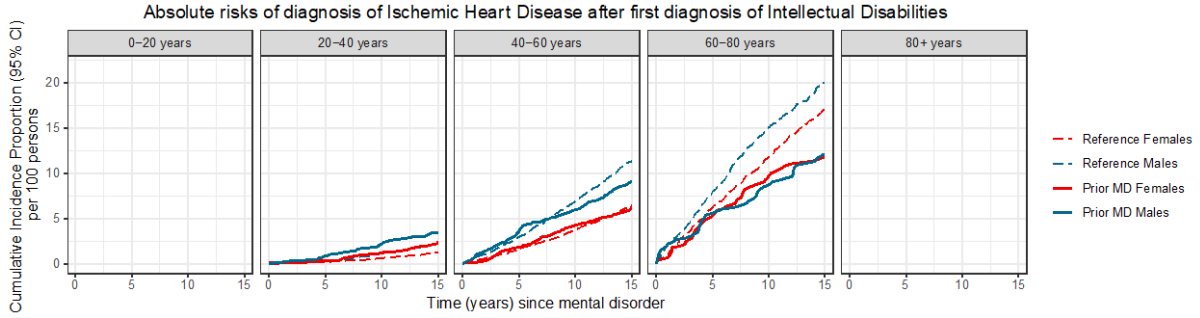


Figure S140.4 – Atrial Fibrillation

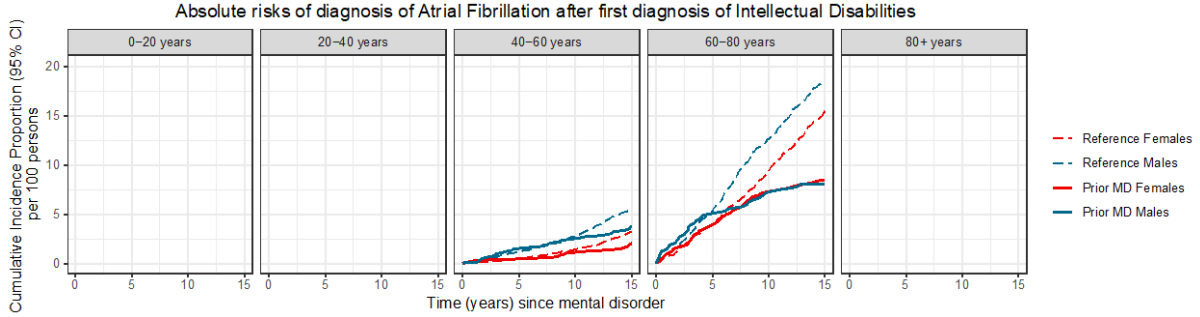


Figure S140.5 – Heart Failure

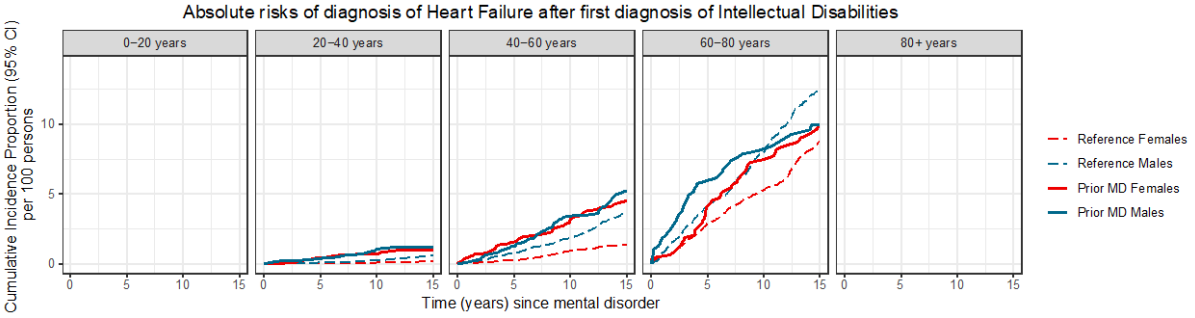


Figure S140.6 – Peripheral Artery Occlusive Disease

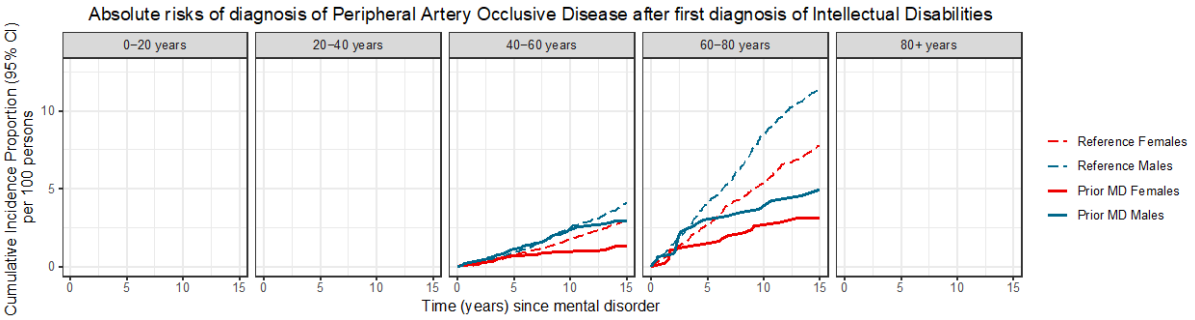


Figure S140.7 – Stroke

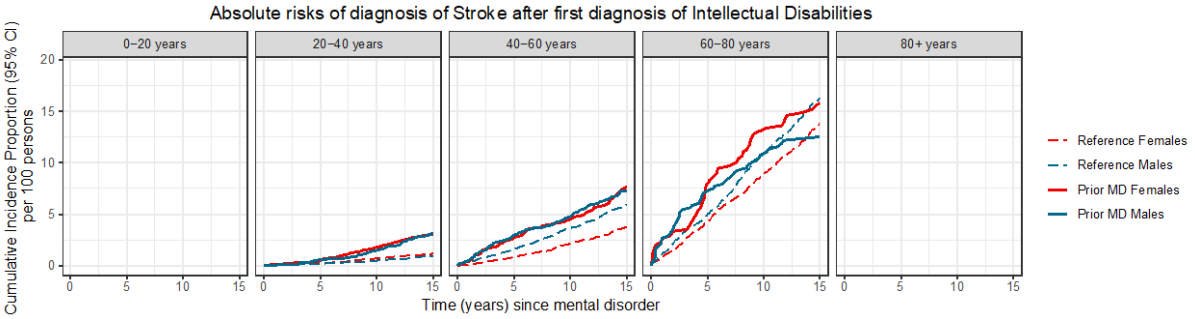


Figure S140.8 – Diabetes Mellitus

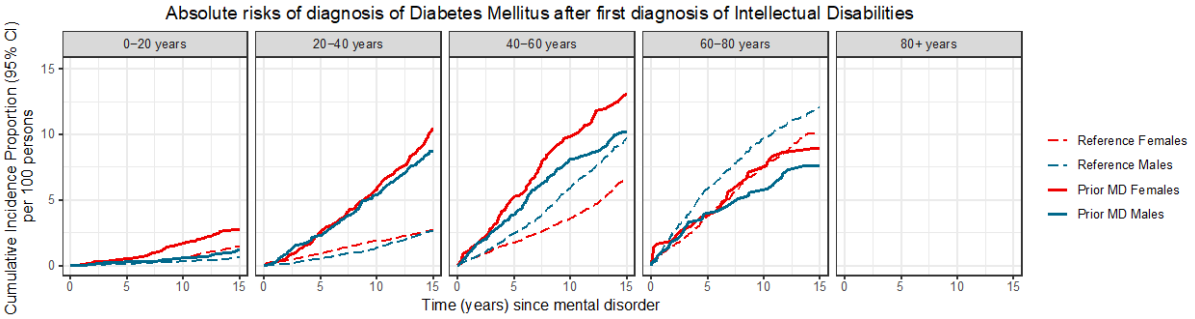


Figure S140.9 – Thyroid Disorders

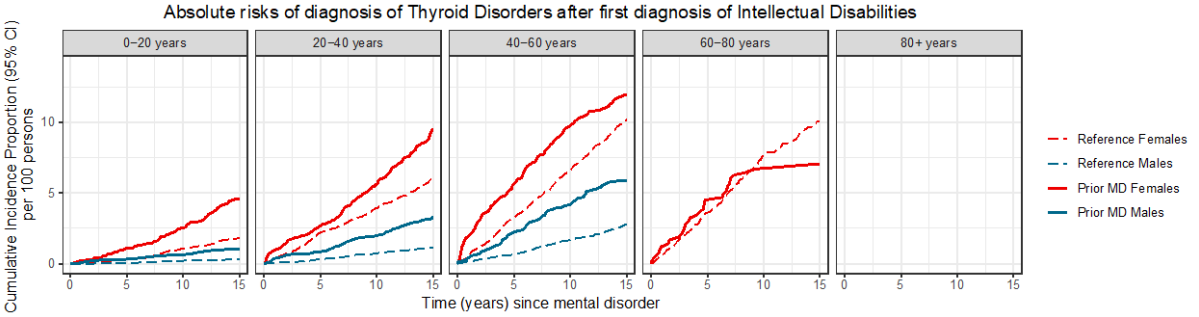


Figure S140.10 – Gout

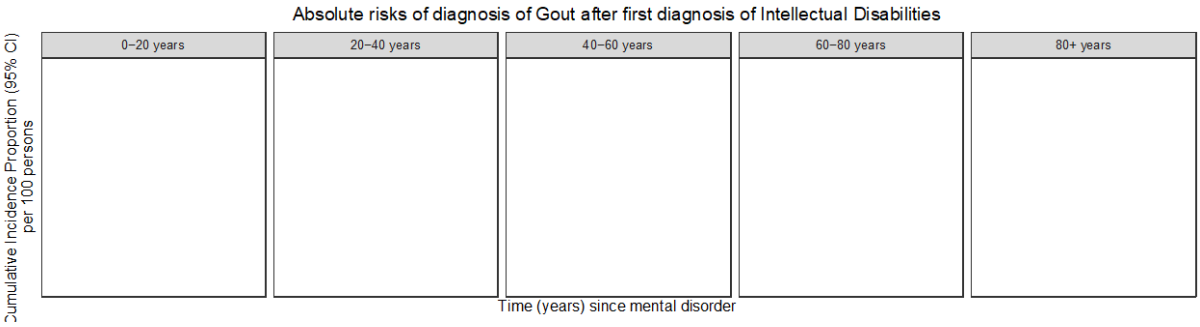


Figure S140.11 – Chronic Pulmonary Disease

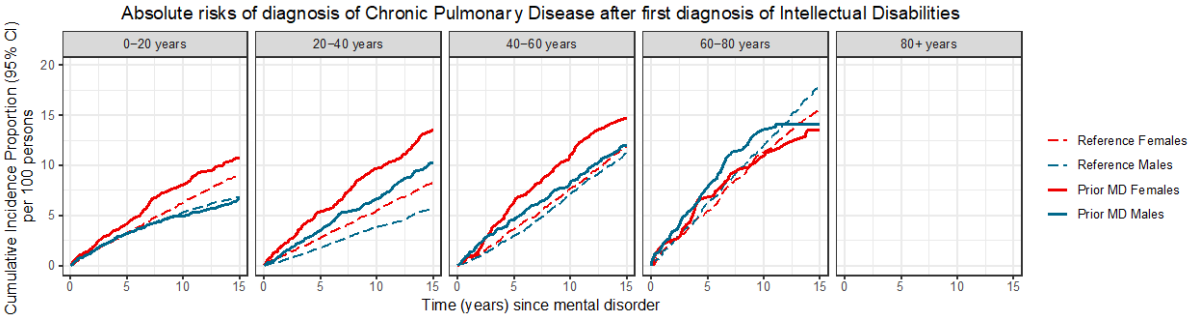


Figure S140.12 – Allergy

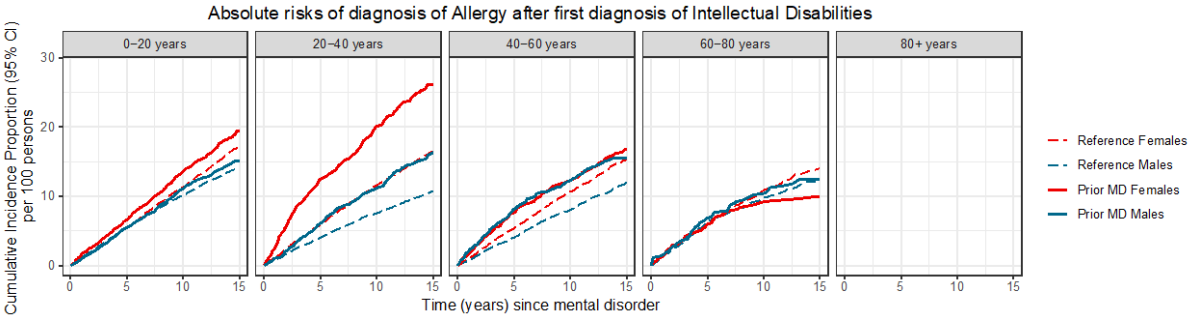


Figure S140.13 – Ulcer/Chronic Gastritis

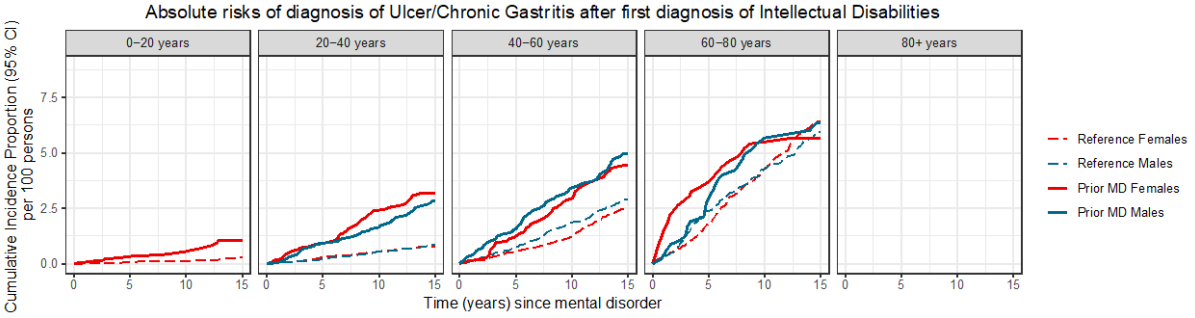


Figure S140.14 – Chronic Liver Disease

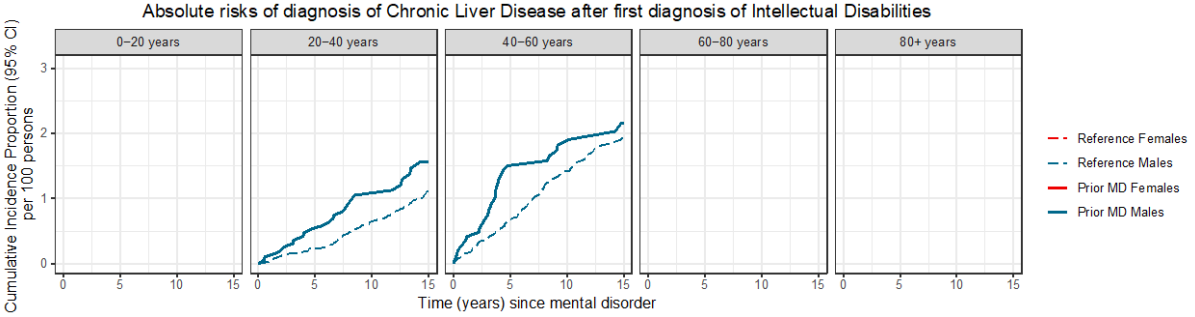


Figure S140.15 – Inflammatory Bowel Disease

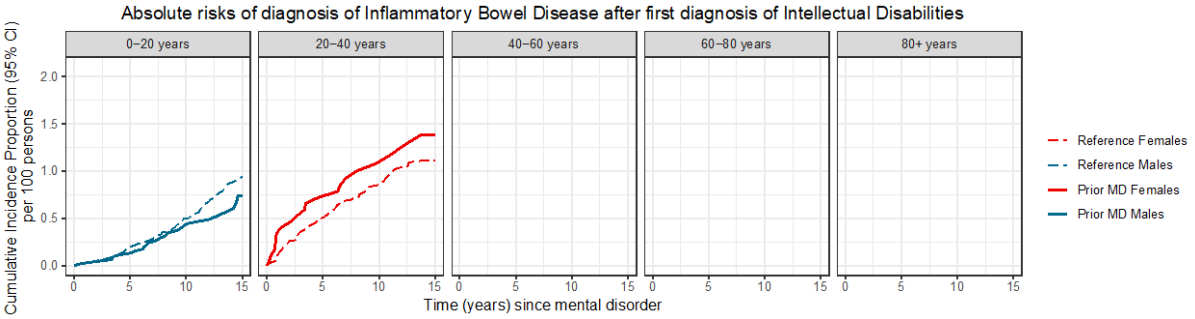


Figure S140.16 – Diverticular Disease of the Intestine

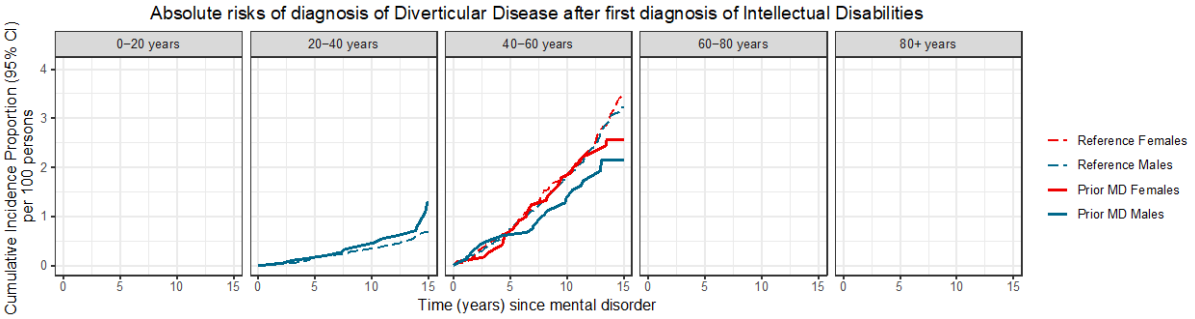


Figure S140.17 – Chronic Kidney Disease

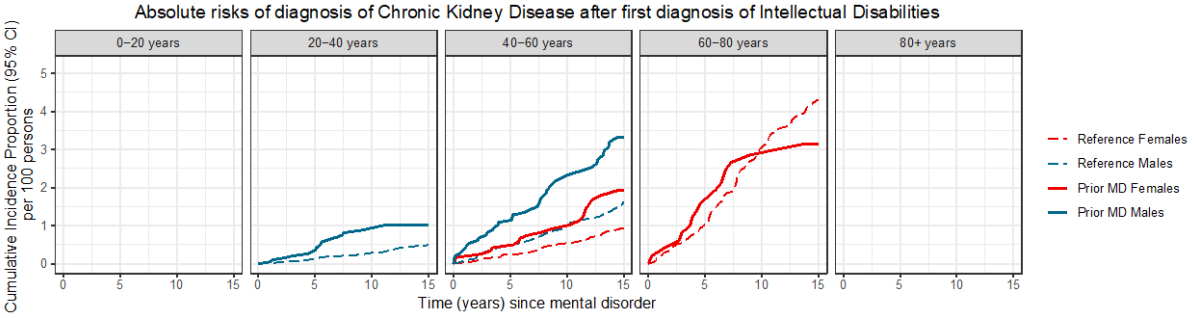


Figure S140.18 – Prostate Disorders

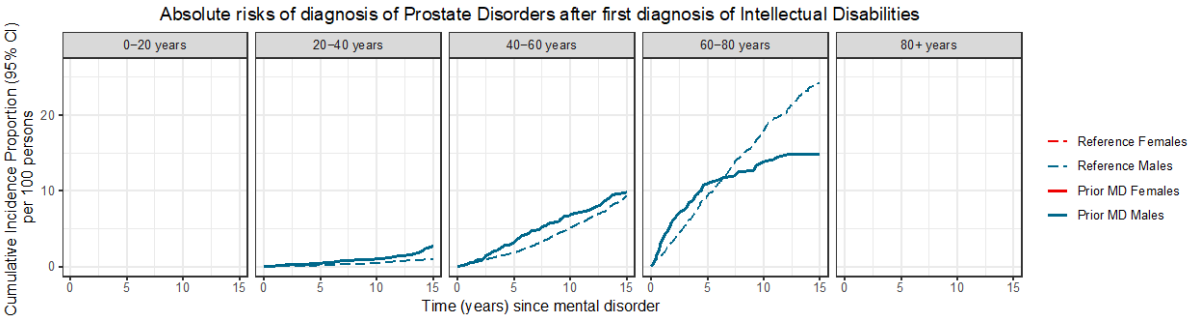


Figure S140.19 – Connective Tissue Disorders

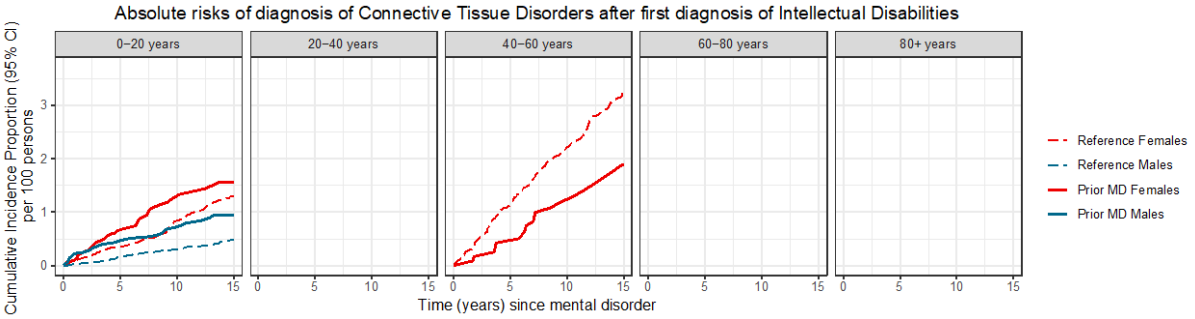


Figure S140.20 – Osteoporosis

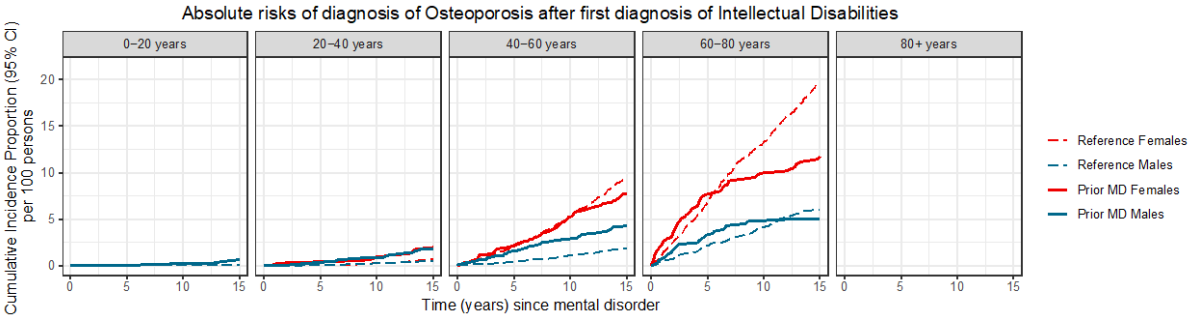


Figure S140.21 – Painful Conditions

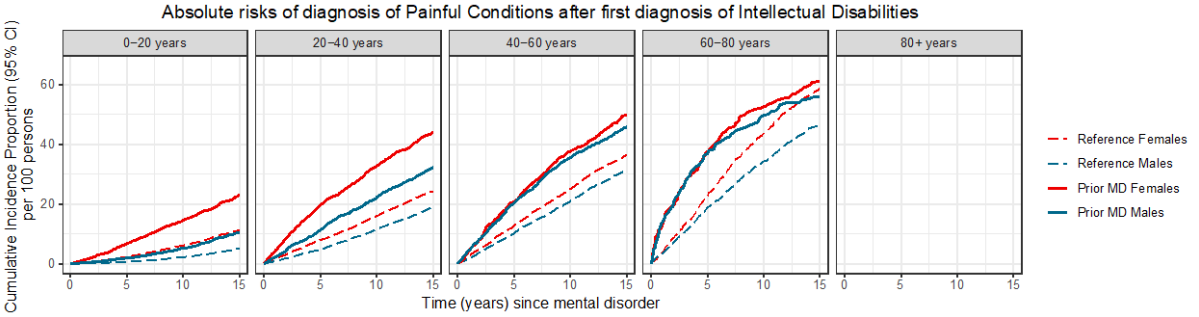


Figure S140.22 – HIV/AIDS

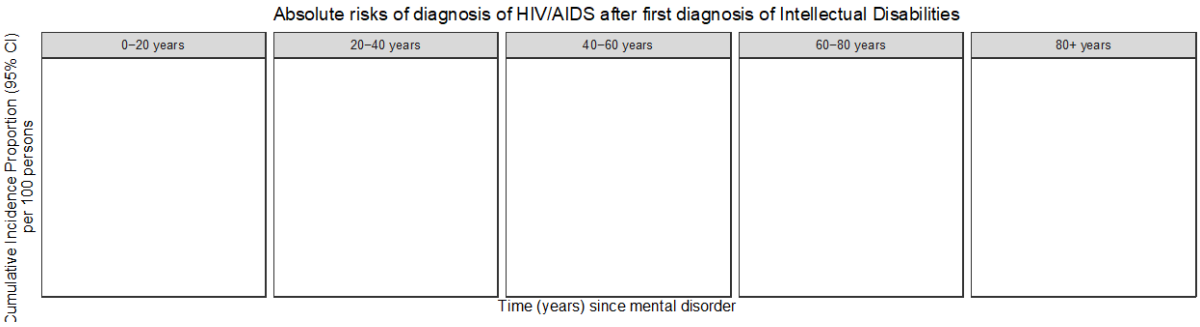


Figure S140.23 – Anemias

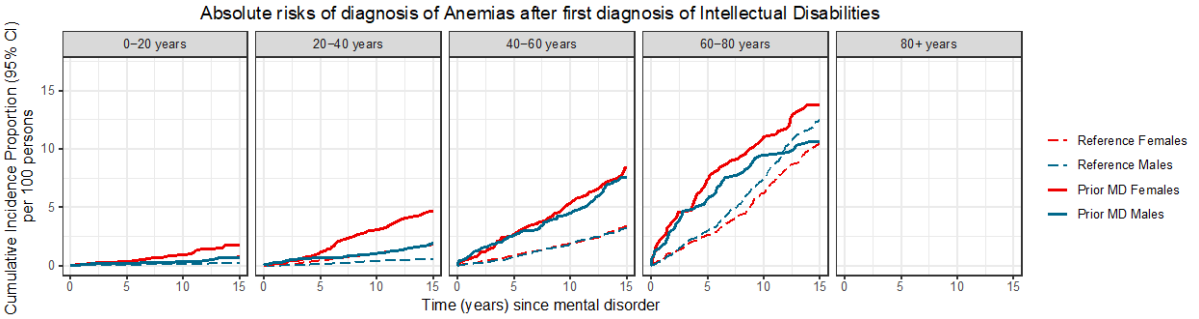


Figure S140.24 – Cancer

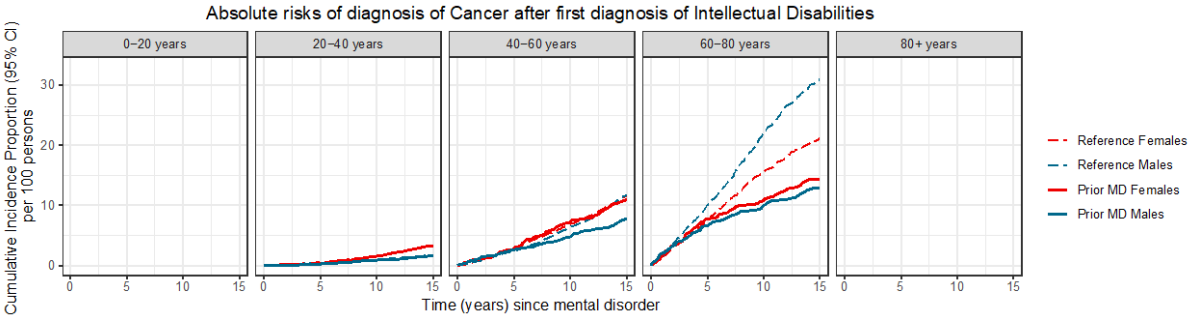


Figure S140.25 – Vision Problems

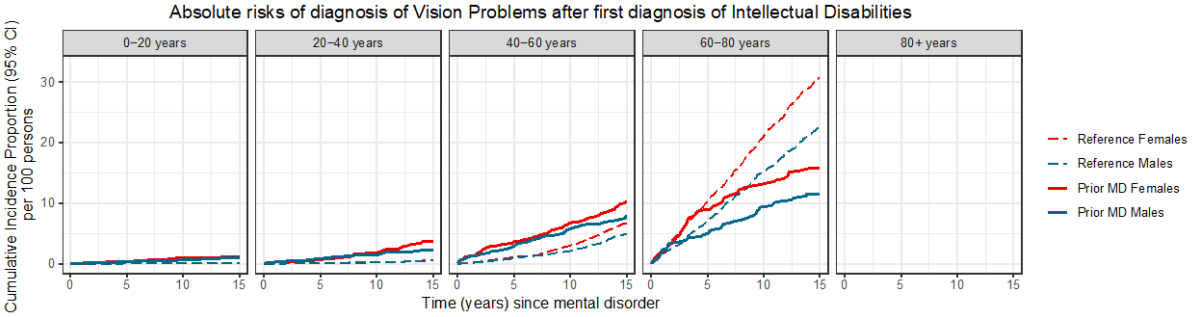


Figure S140.26 – Hearing Problems

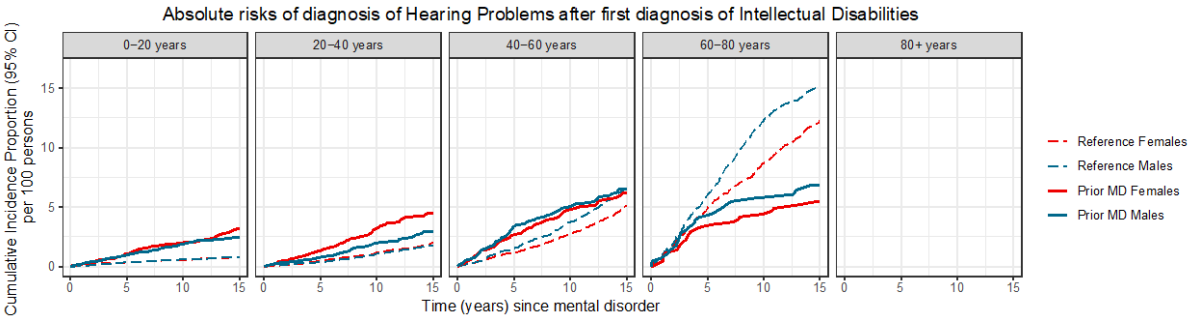


Figure S140.27 – Migraine

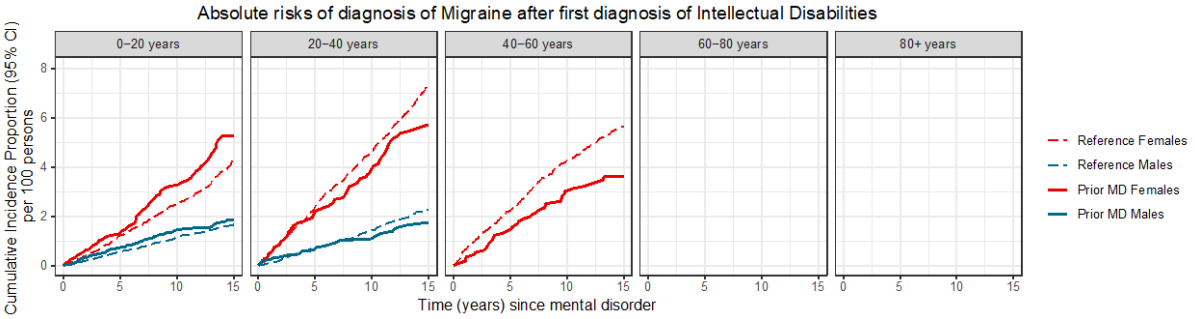


Figure S140.28 – Epilepsy

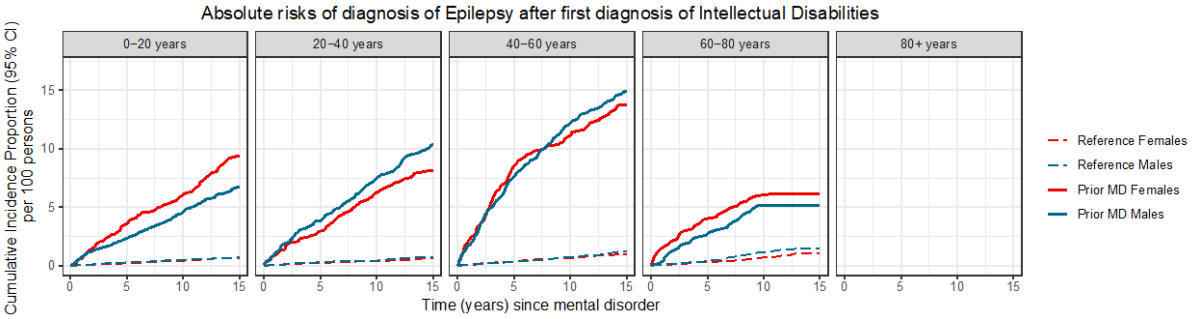


Figure S140.29 – Parkinson's Disease

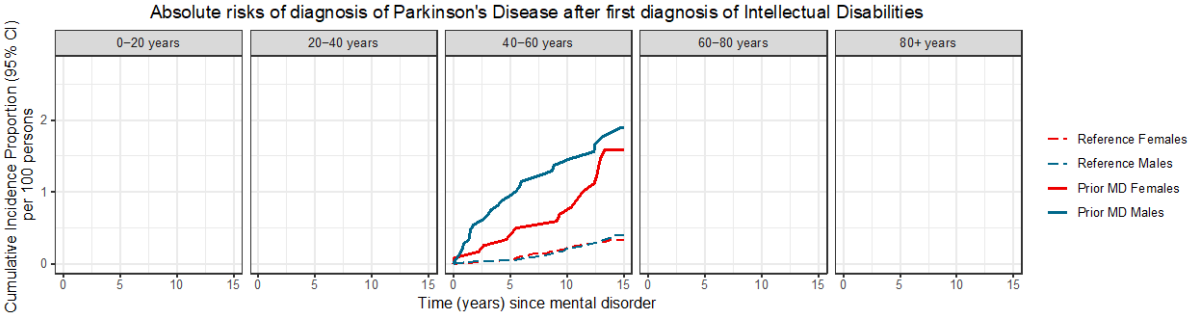


Figure S140.30 – Multiple Sclerosis

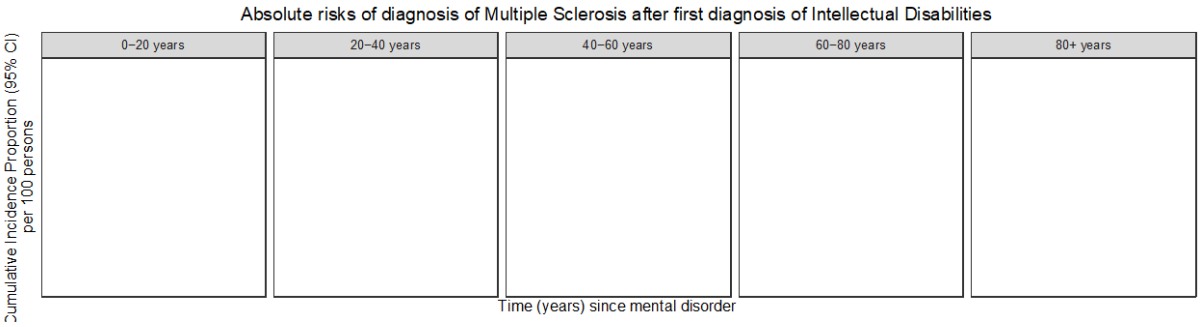
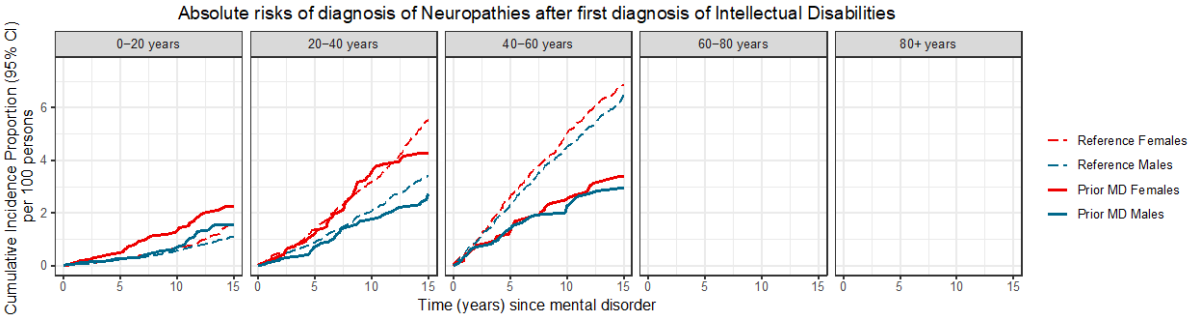


Figure S140.31 – Neuropathies



Figures S141.1-S141.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Developmental Disorders

Figure S141.1 - Hypertension

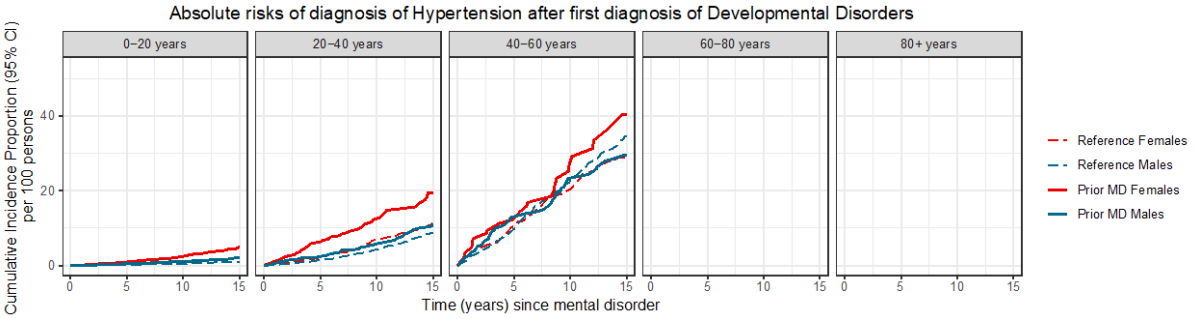


Figure S141.2 – Dyslipidemia

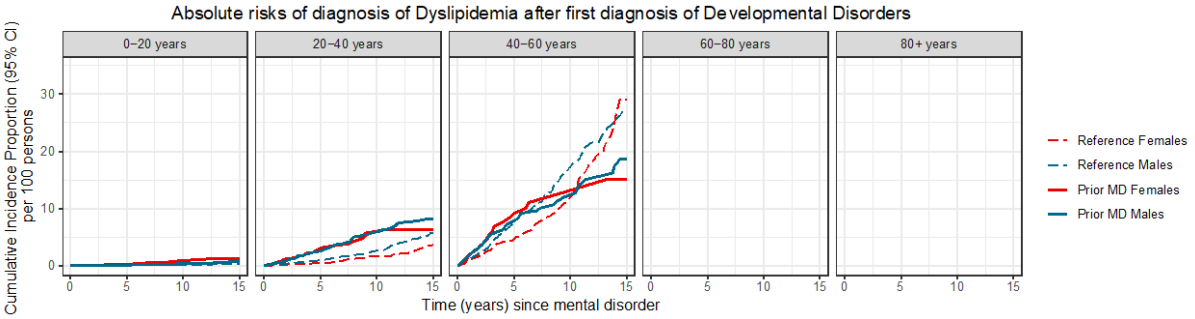


Figure S141.3 – Ischemic Heart Disease

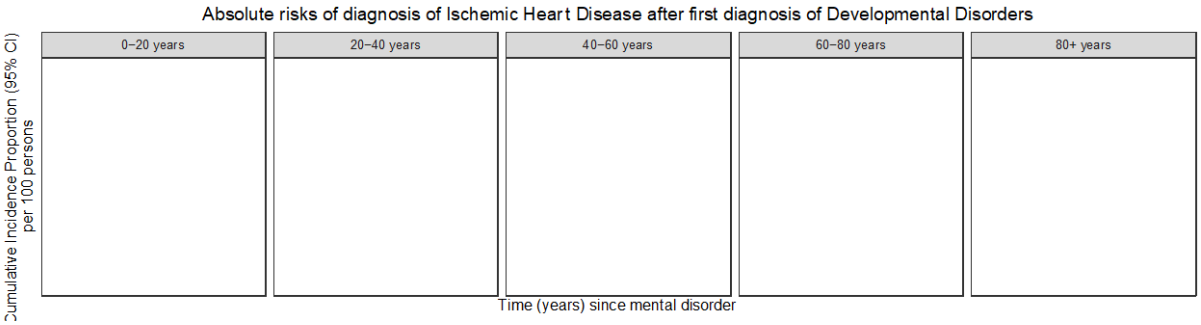


Figure S141.4 – Atrial Fibrillation

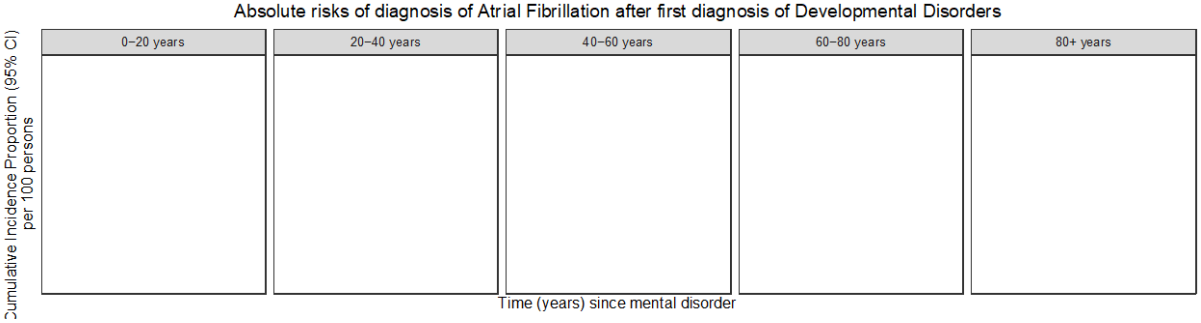


Figure S141.5 – Heart Failure

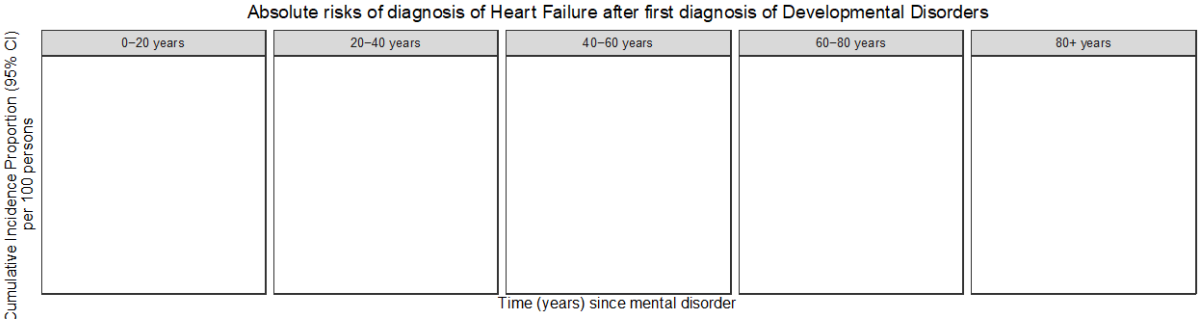


Figure S141.6 – Peripheral Artery Occlusive Disease

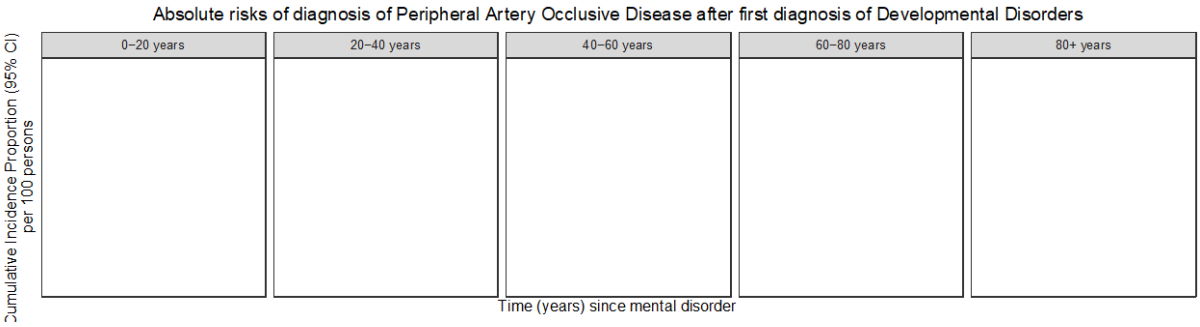


Figure S141.7 – Stroke

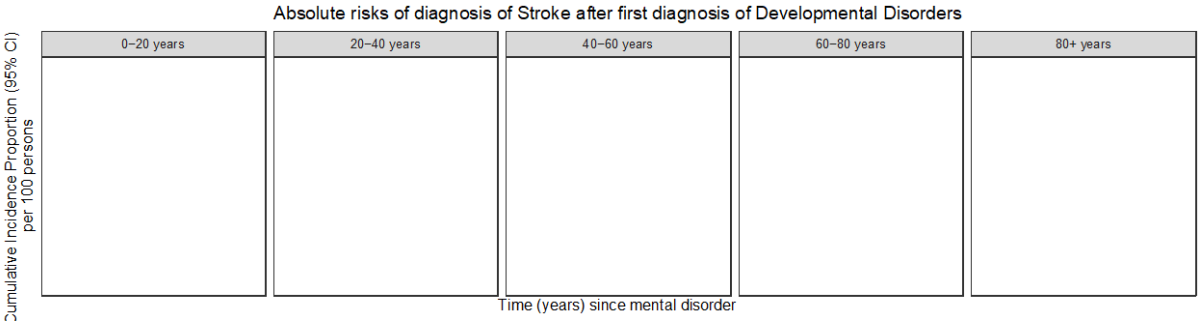


Figure S141.8 – Diabetes Mellitus

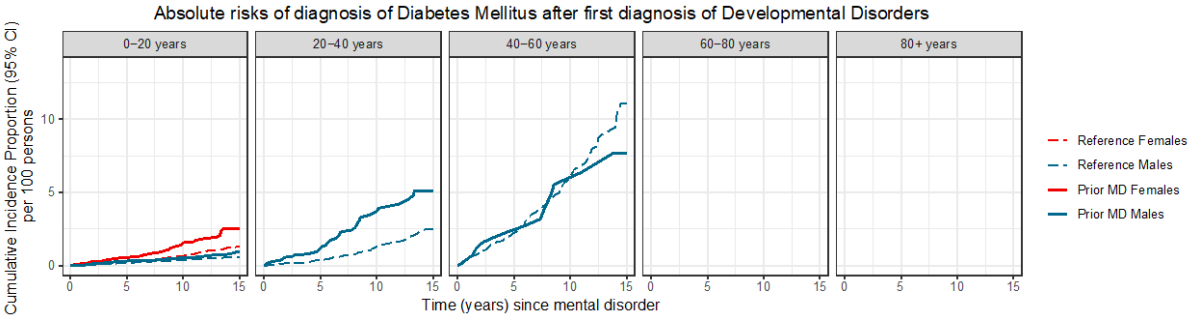


Figure S141.9 – Thyroid Disorders

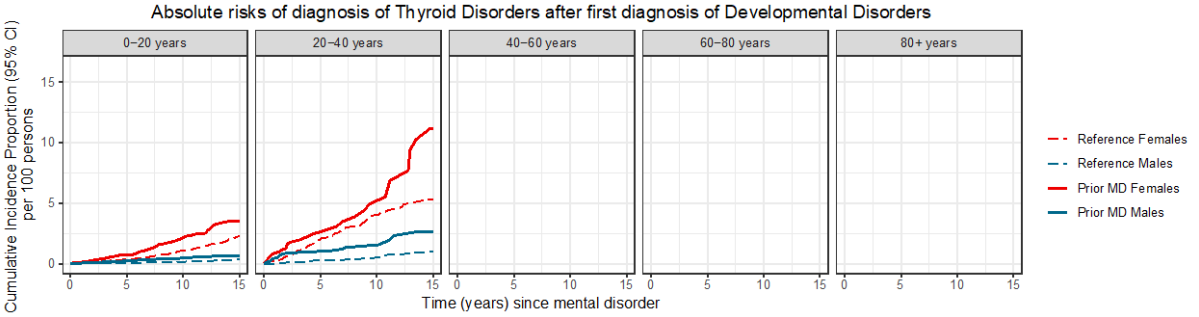


Figure S141.10 – Gout

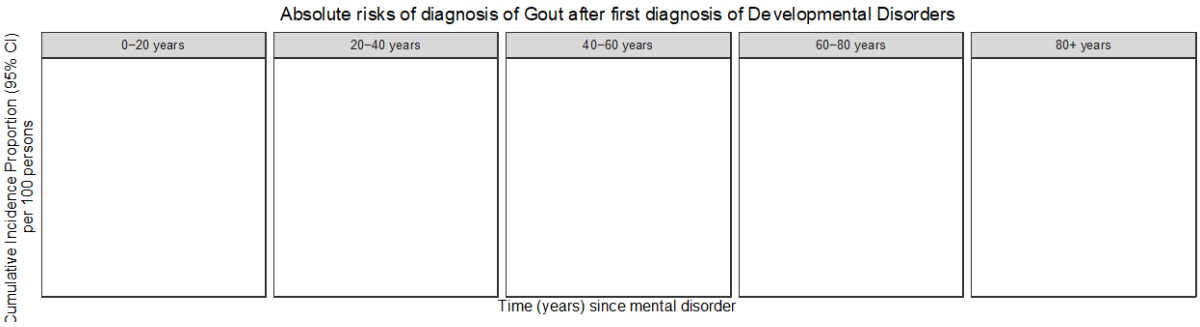


Figure S141.11 – Chronic Pulmonary Disease

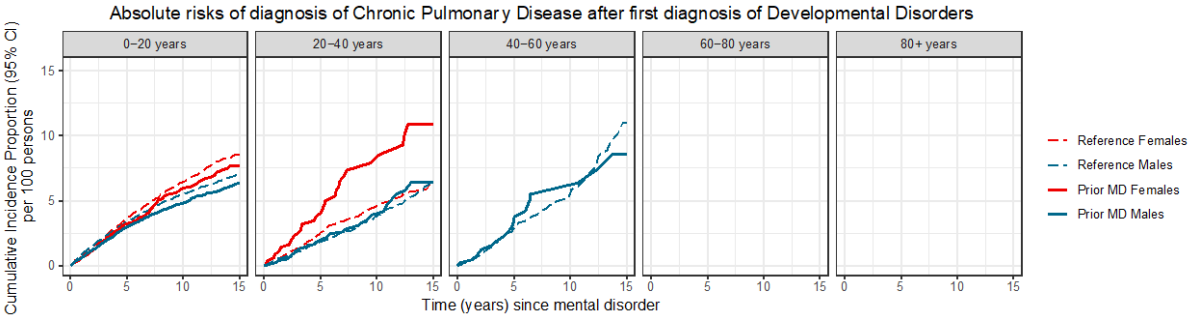


Figure S141.12 – Allergy

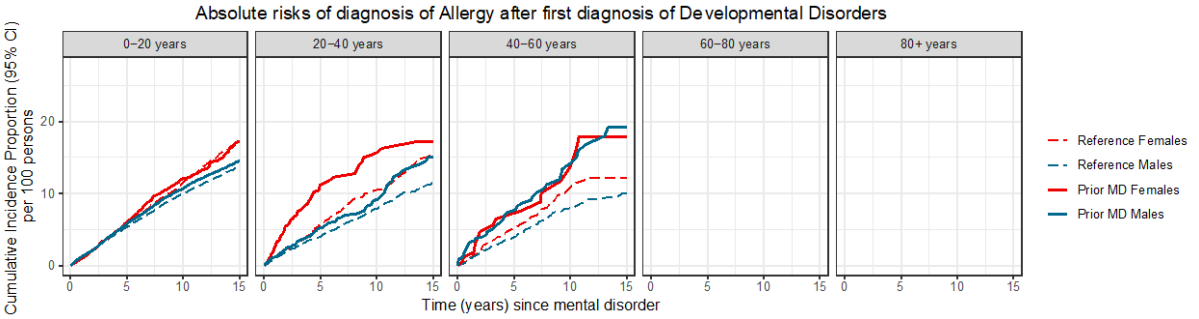


Figure S141.13 – Ulcer/Chronic Gastritis

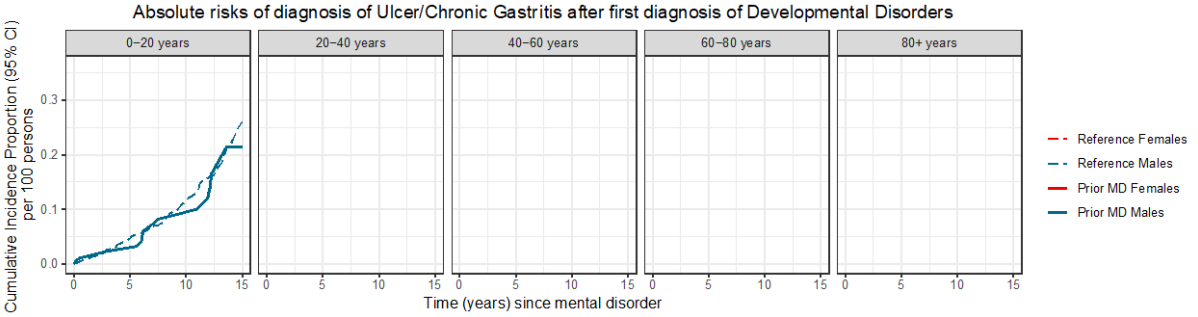


Figure S141.14 – Chronic Liver Disease

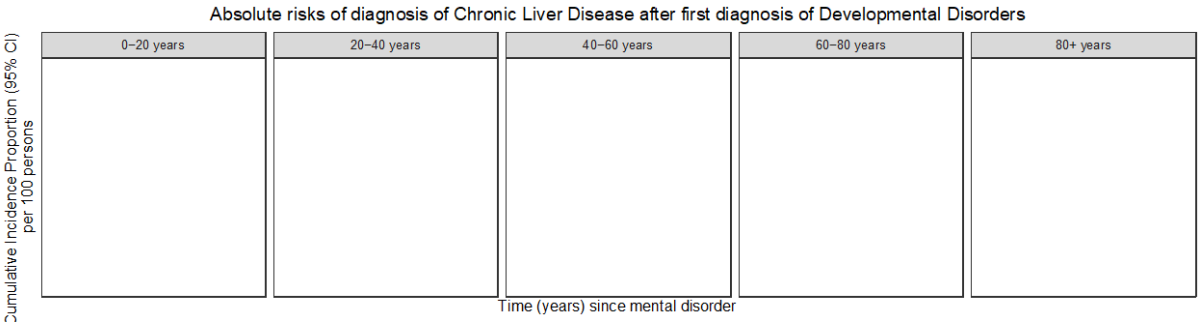


Figure S141.15 – Inflammatory Bowel Disease

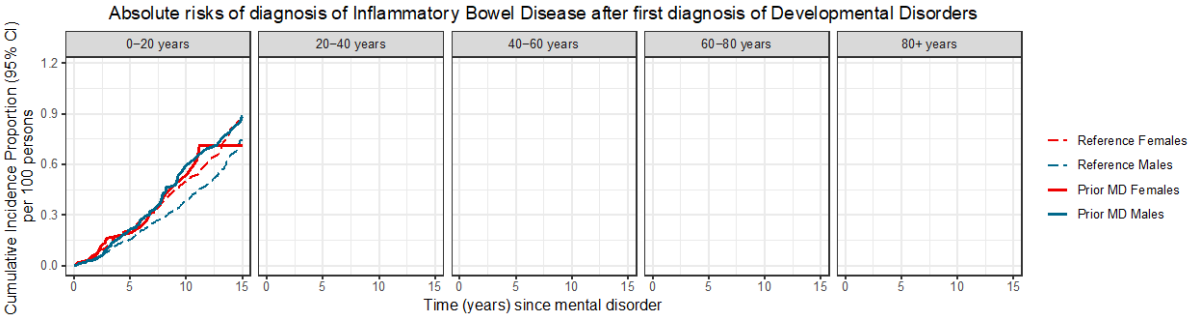


Figure S141.16 – Diverticular Disease of the Intestine

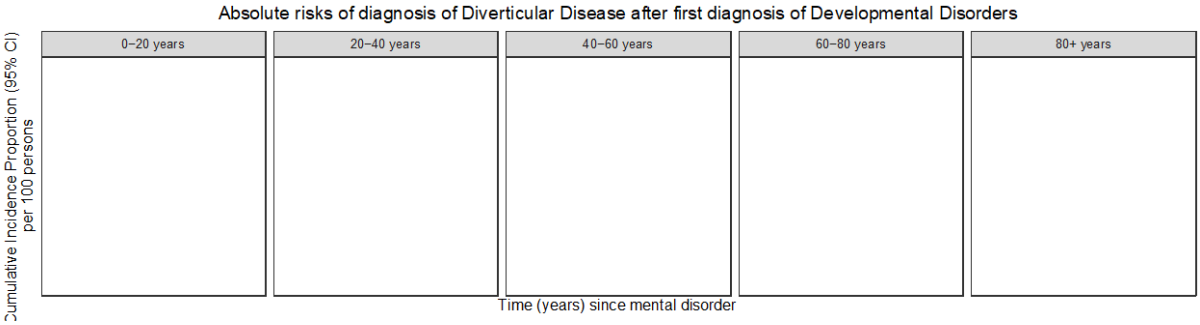


Figure S141.17 – Chronic Kidney Disease

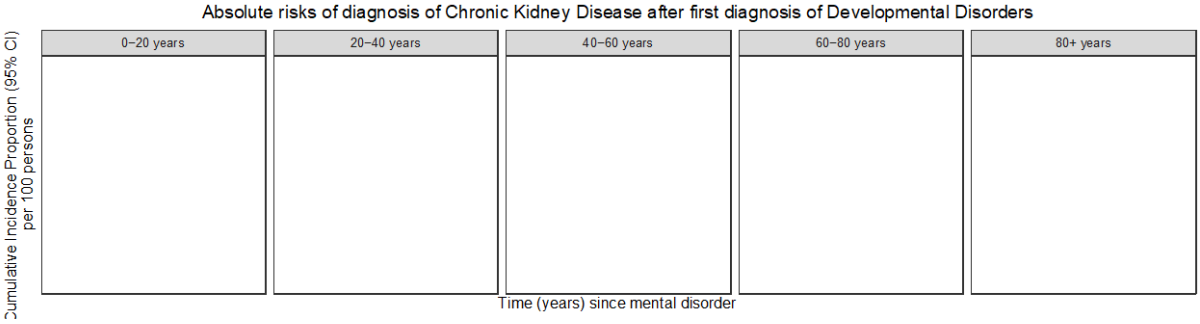


Figure S141.18 – Prostate Disorders

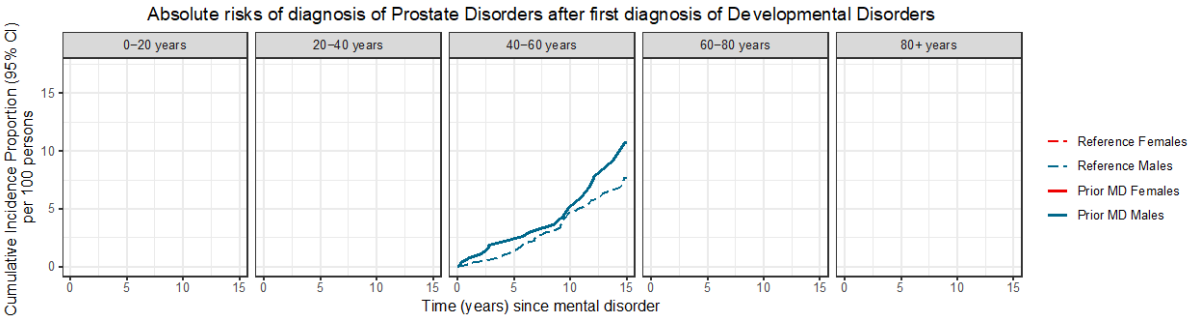


Figure S141.19 – Connective Tissue Disorders

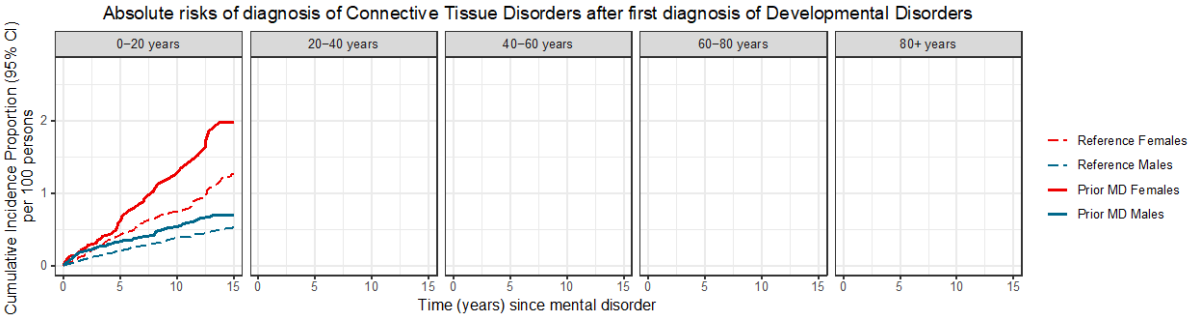


Figure S141.20 – Osteoporosis

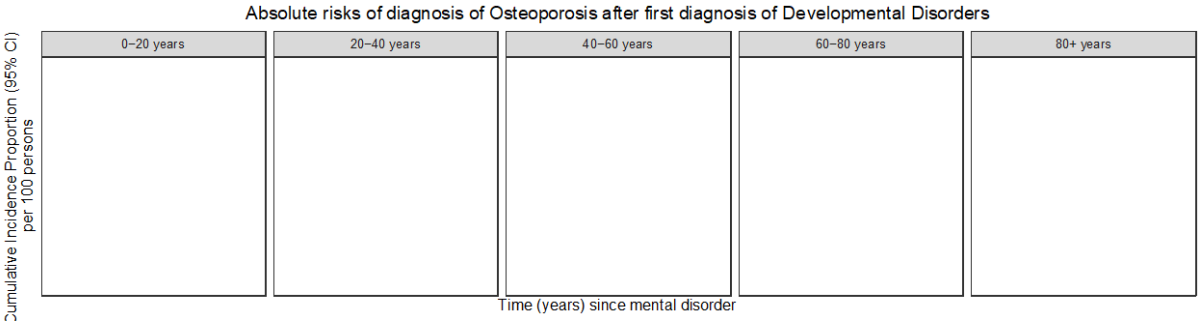


Figure S141.21 – Painful Conditions

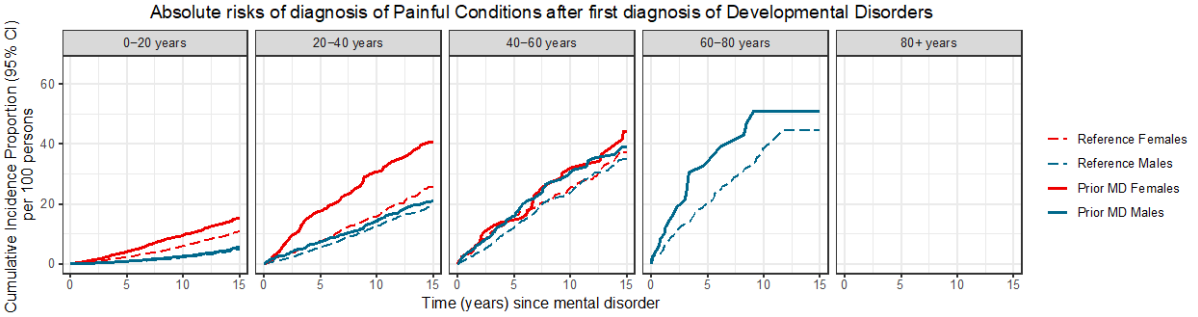


Figure S141.22 – HIV/AIDS

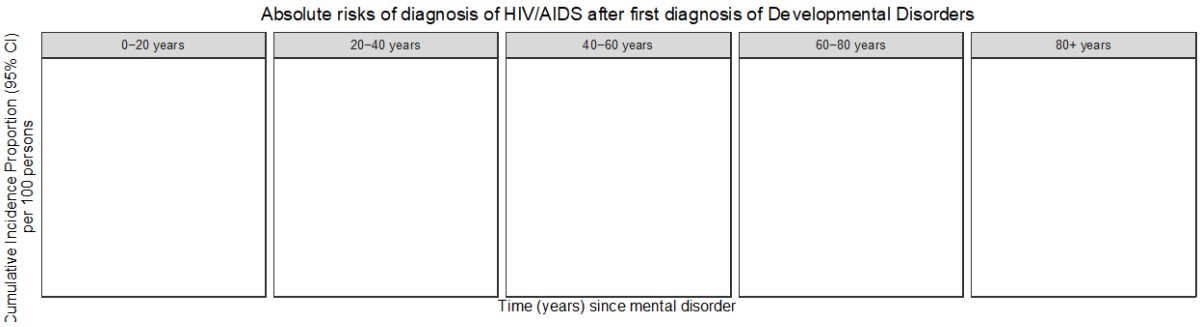


Figure S141.23 – Anemias

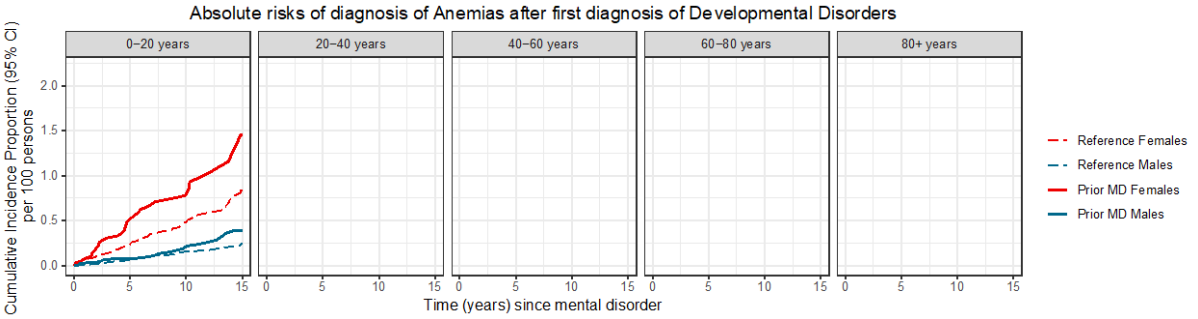


Figure S141.24 – Cancer

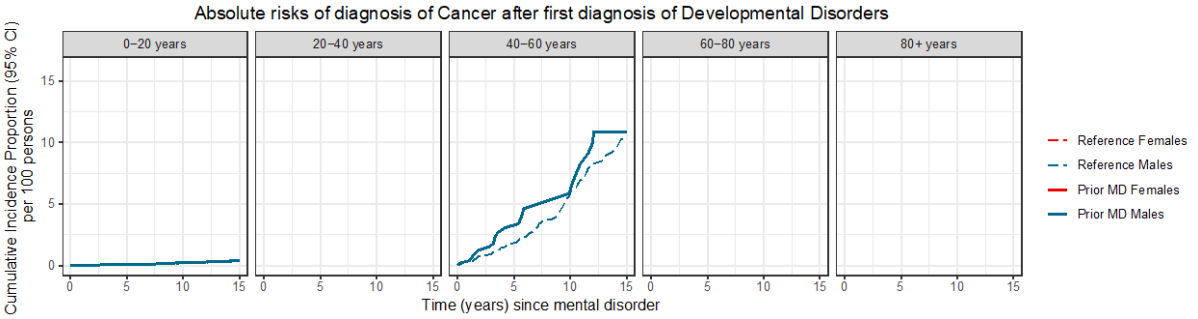


Figure S141.25 – Vision Problems

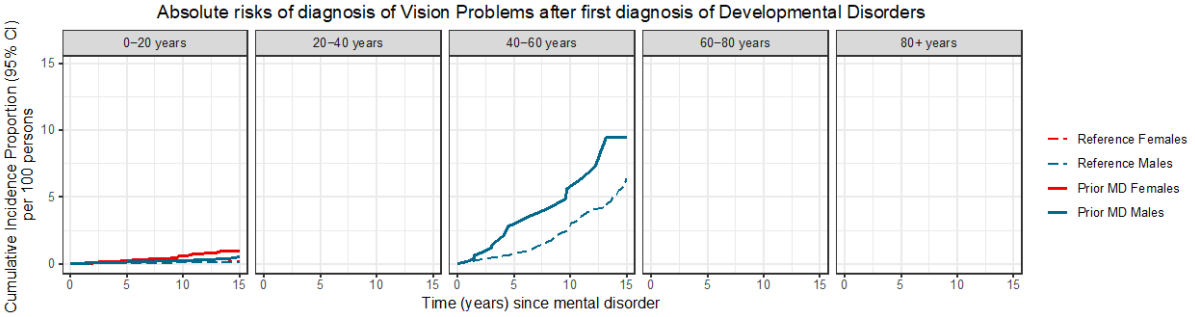


Figure S141.26 – Hearing Problems

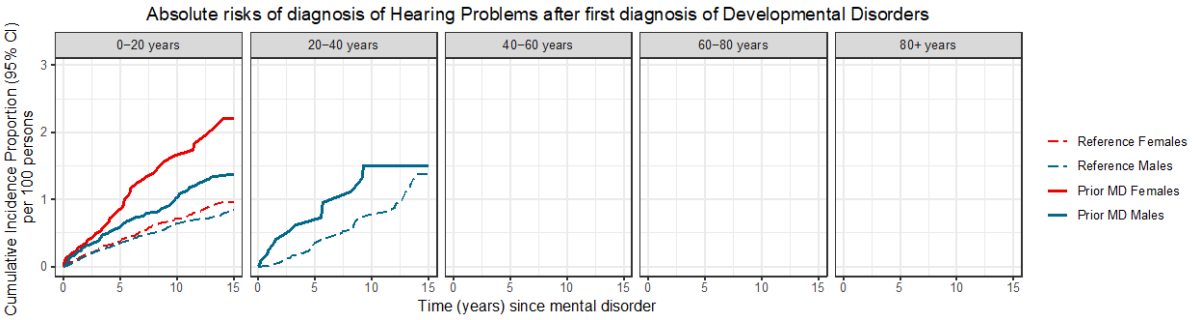


Figure S141.27 – Migraine

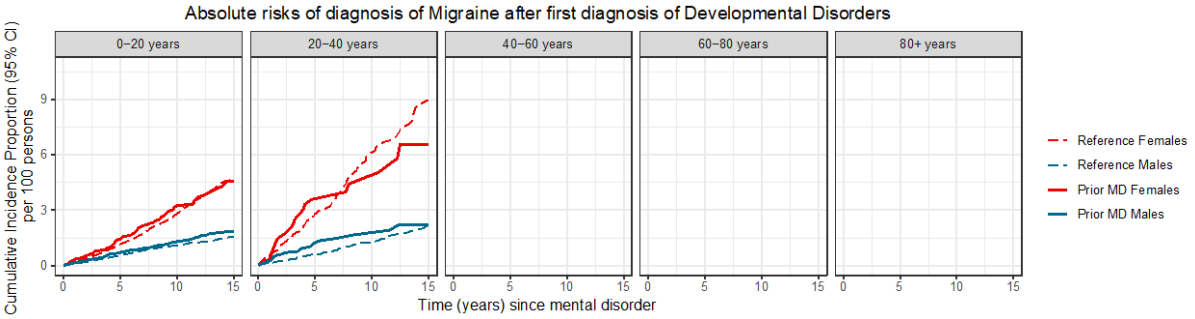


Figure S141.28 – Epilepsy

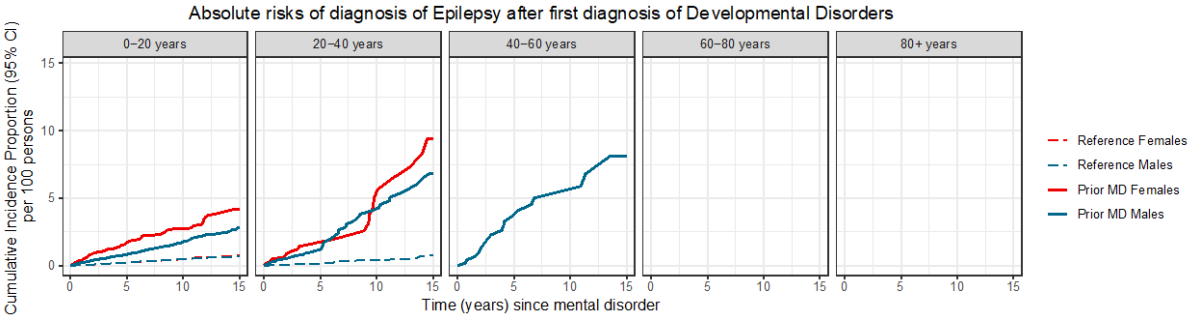


Figure S141.29 – Parkinson's Disease

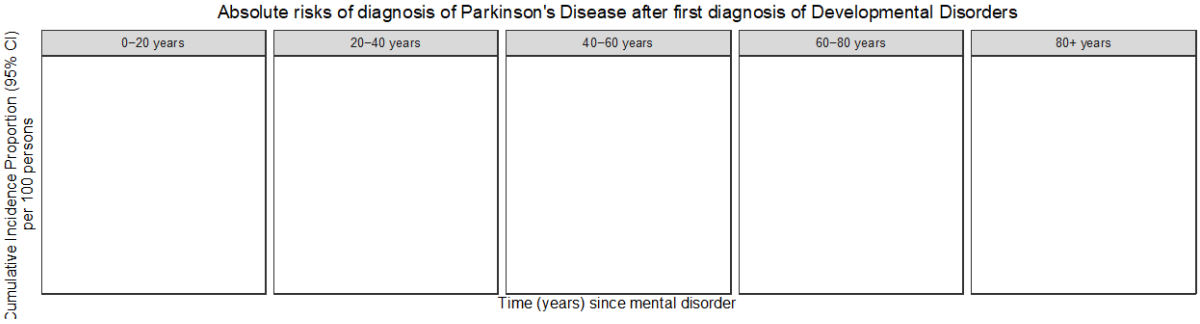


Figure S141.30 – Multiple Sclerosis

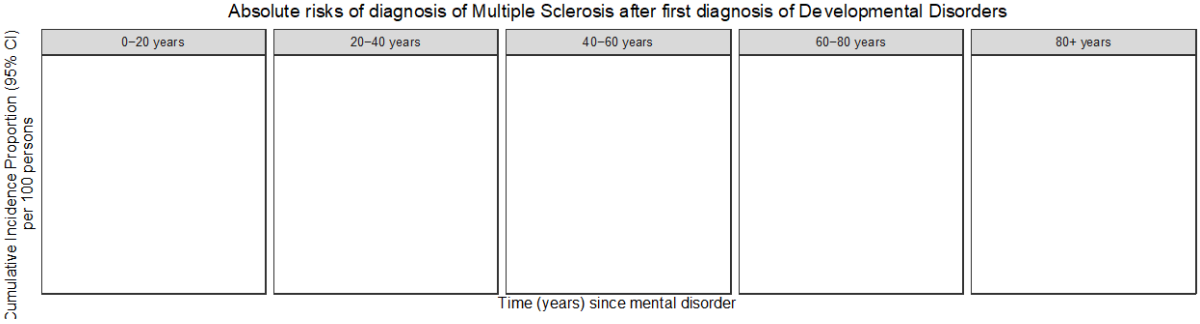
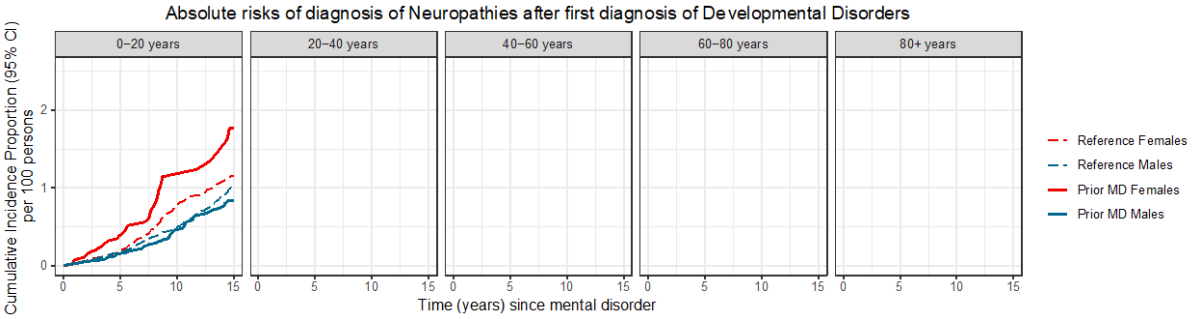


Figure S141.31 – Neuropathies



Figures S142.1-S142.31. Sex-specific absolute risks of being diagnosed with general medical conditions after a first diagnosis of Behavioral Disorders

Figure S142.1 - Hypertension

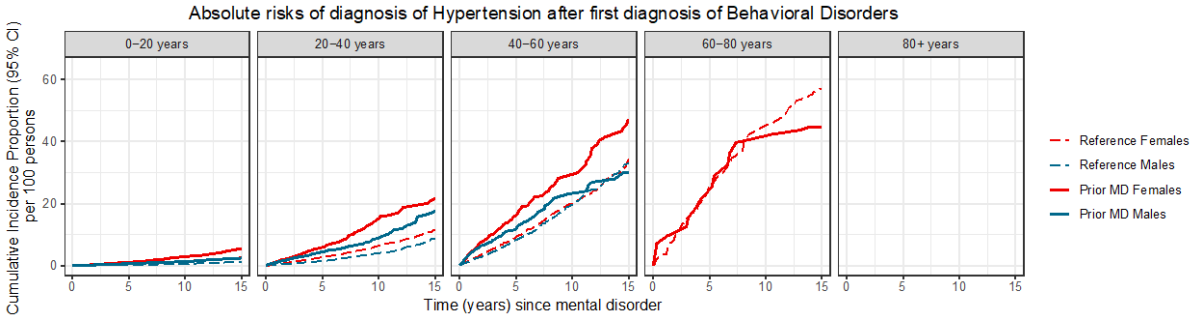


Figure S142.2 – Dyslipidemia

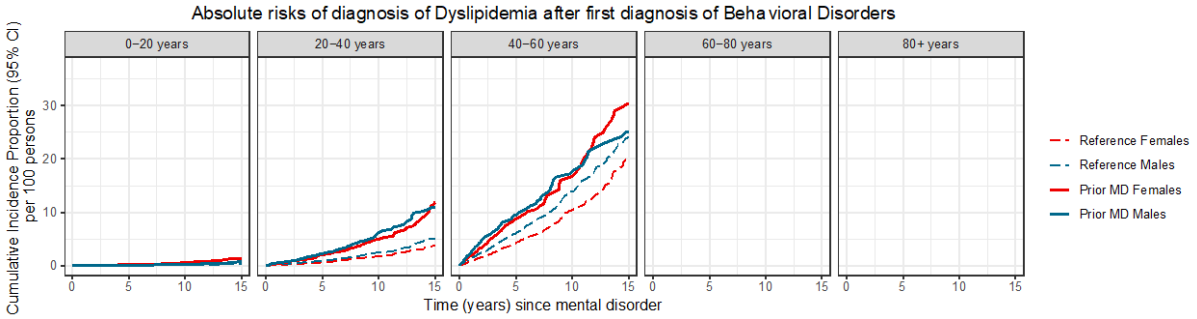


Figure S142.3 – Ischemic Heart Disease

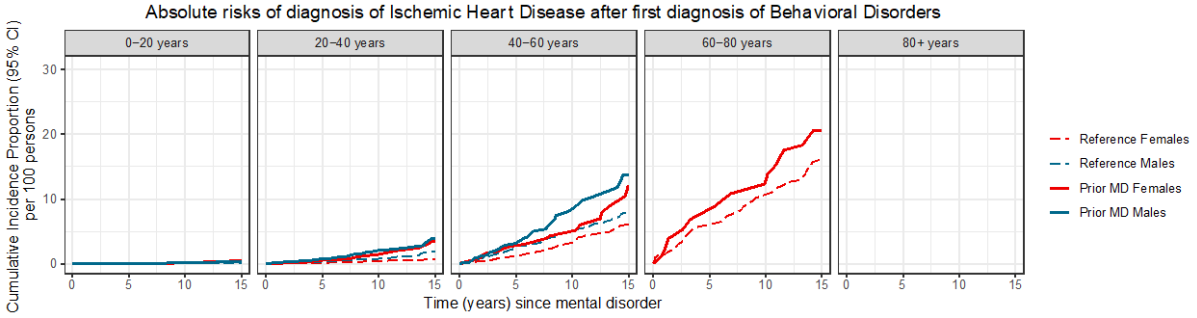


Figure S142.4 – Atrial Fibrillation

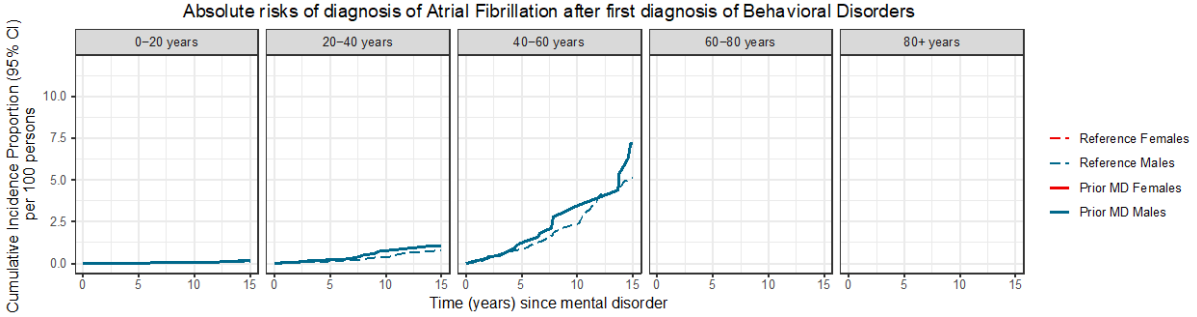


Figure S142.5 – Heart Failure

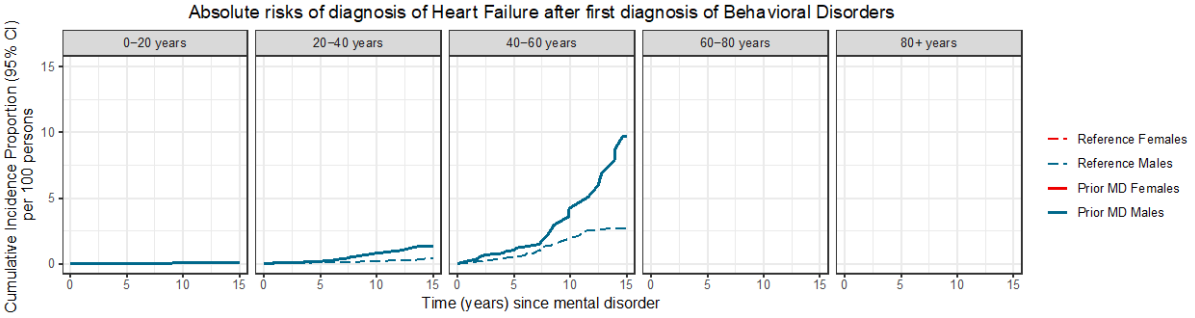


Figure S142.6 – Peripheral Artery Occlusive Disease

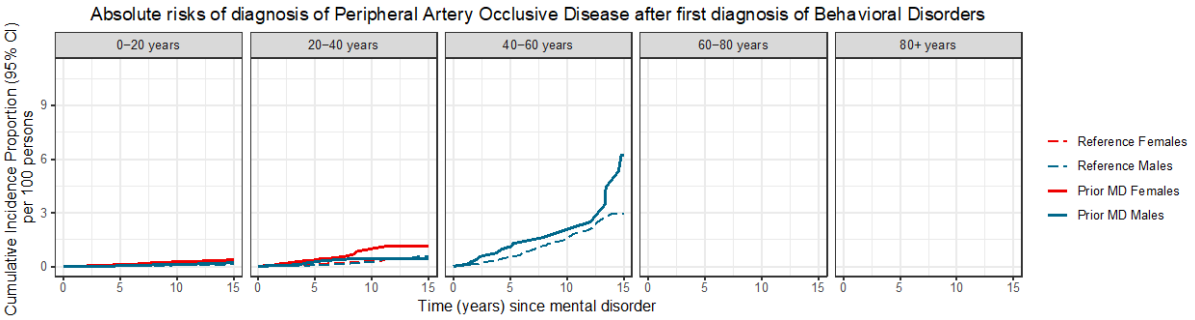


Figure S142.7 – Stroke

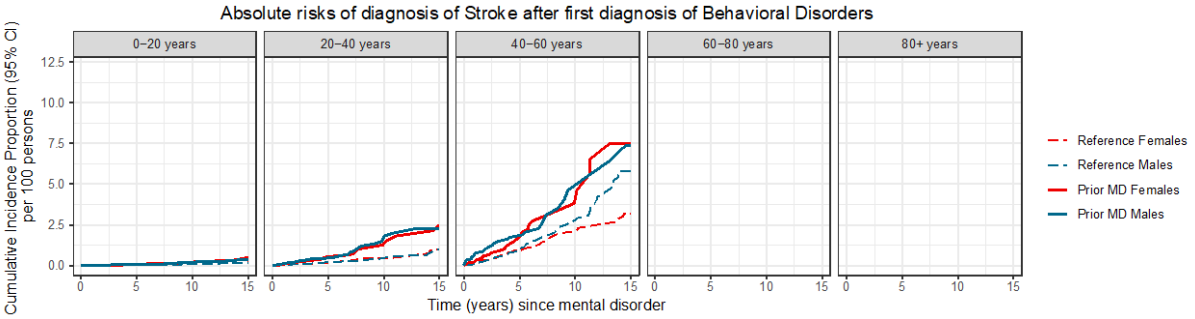


Figure S142.8 – Diabetes Mellitus

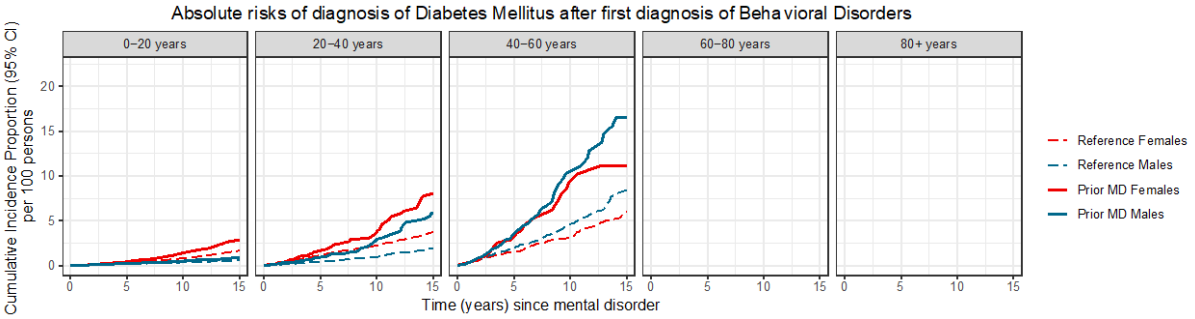


Figure S142.9 – Thyroid Disorders

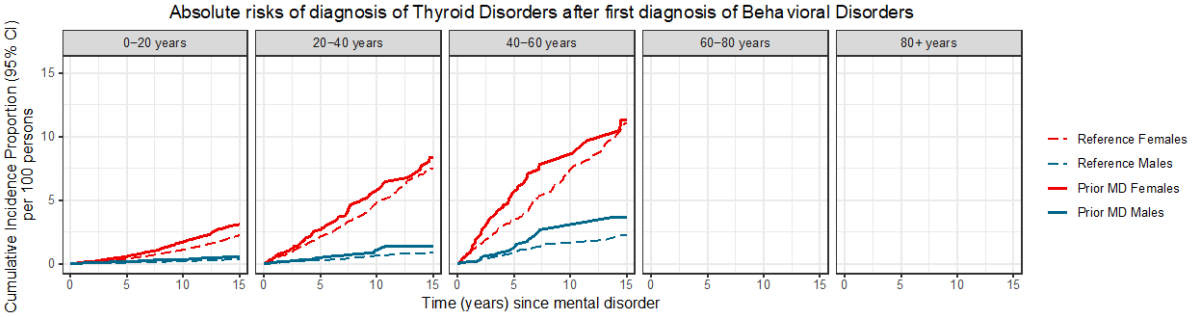


Figure S142.10 – Gout

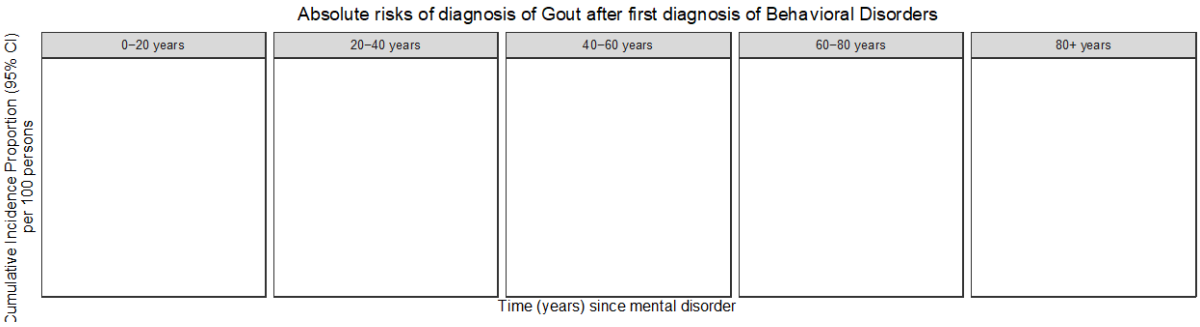


Figure S142.11 – Chronic Pulmonary Disease

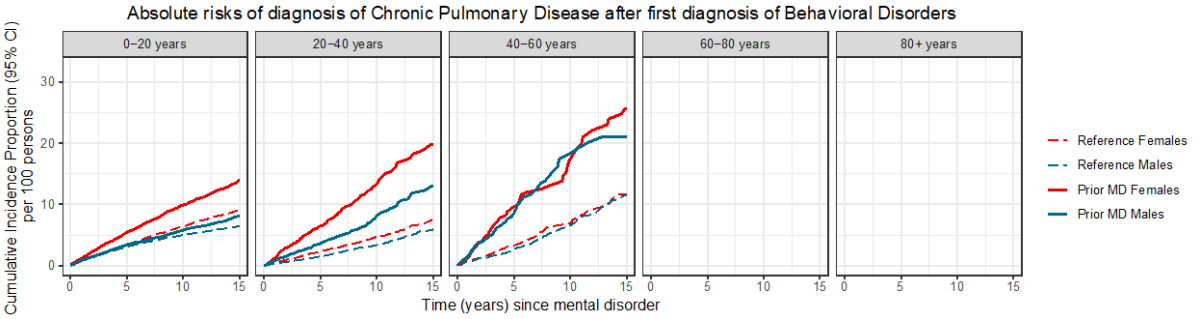


Figure S142.12 – Allergy

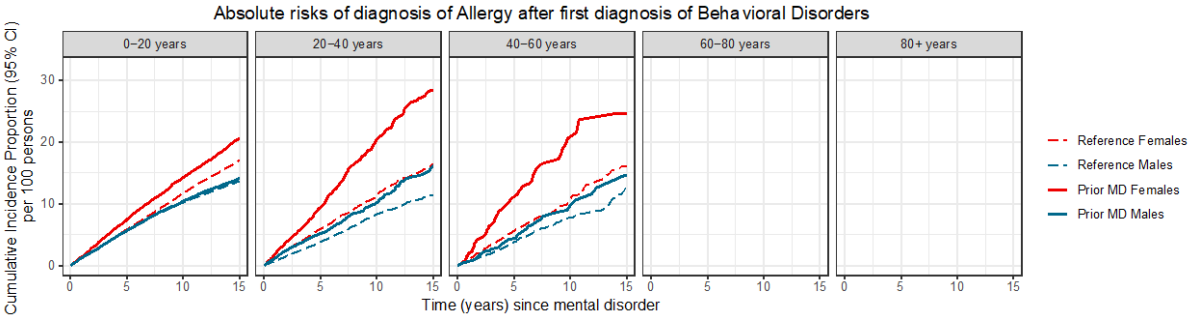


Figure S142.13 – Ulcer/Chronic Gastritis

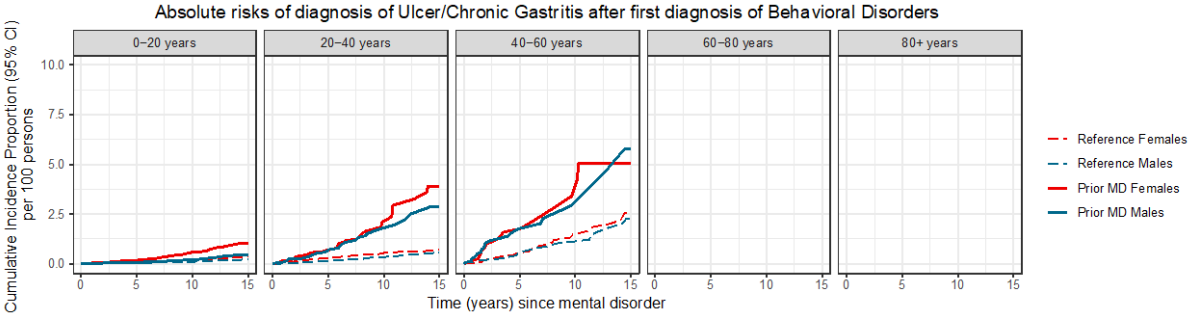


Figure S142.14 – Chronic Liver Disease

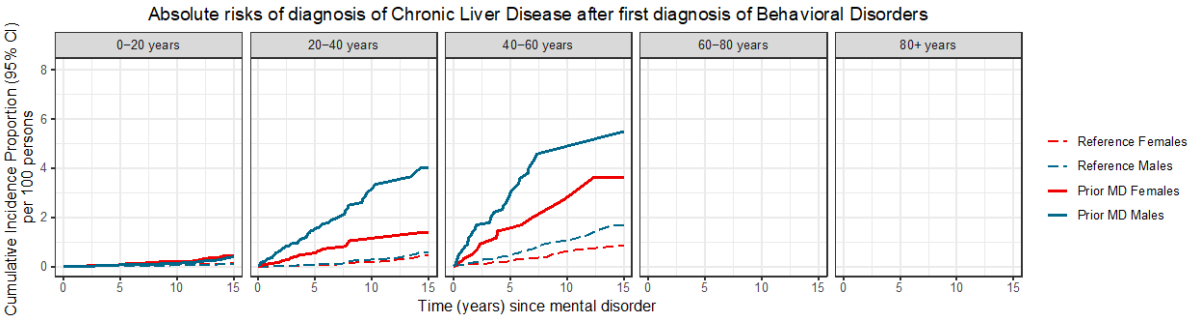


Figure S142.15 – Inflammatory Bowel Disease

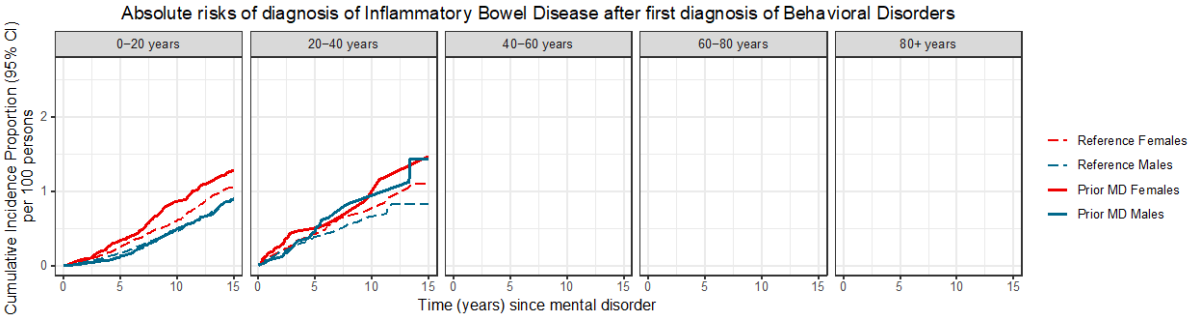


Figure S142.16 – Diverticular Disease of the Intestine

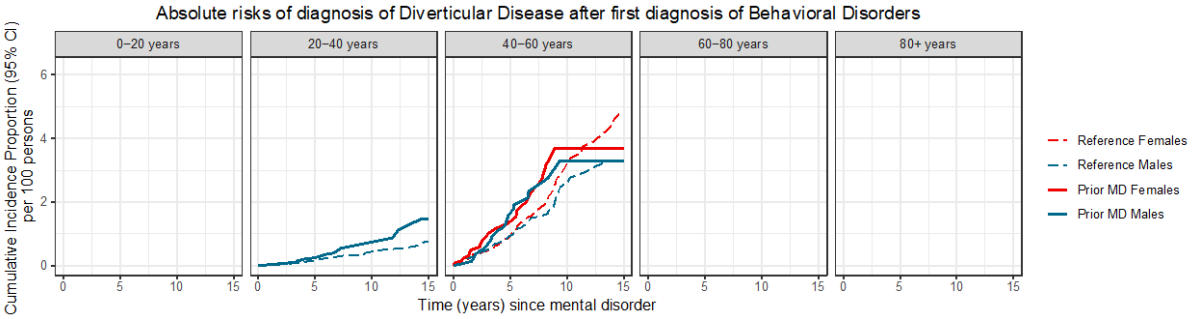


Figure S142.17 – Chronic Kidney Disease

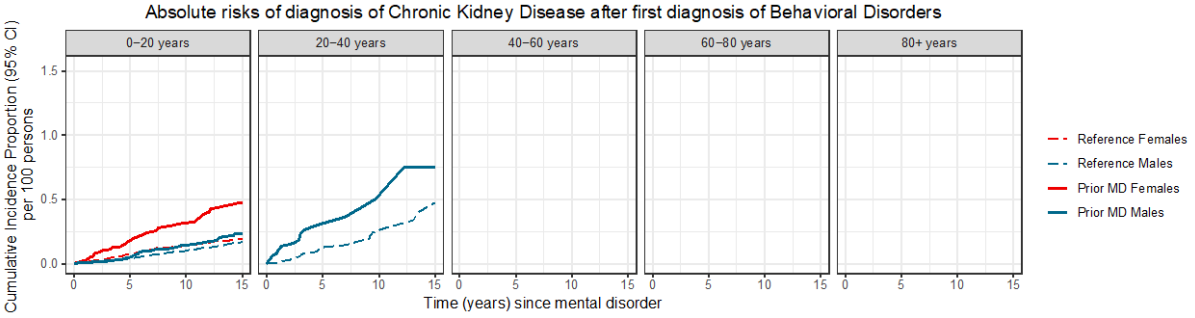


Figure S142.18 – Prostate Disorders

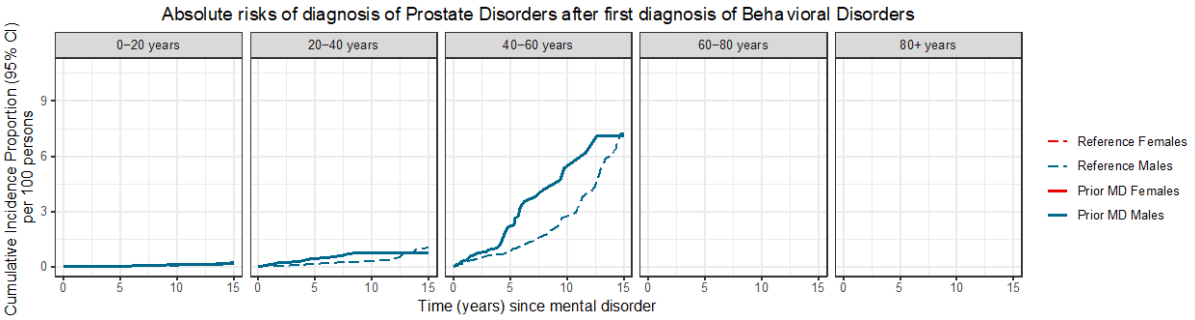


Figure S142.19 – Connective Tissue Disorders

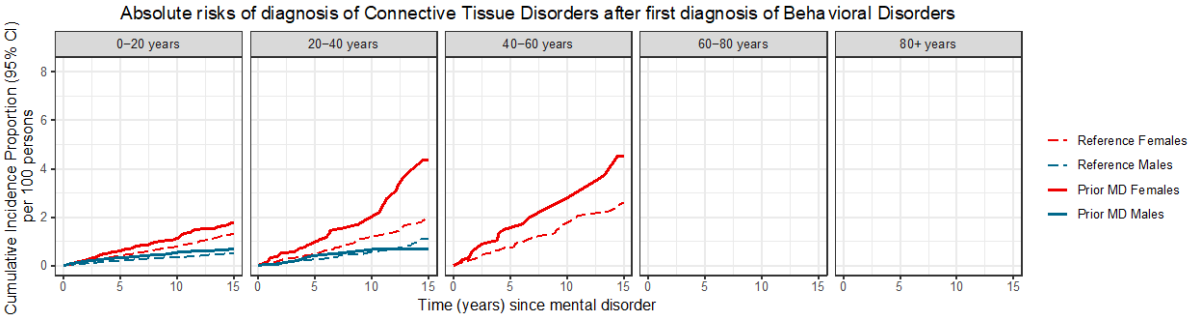


Figure S142.20 – Osteoporosis

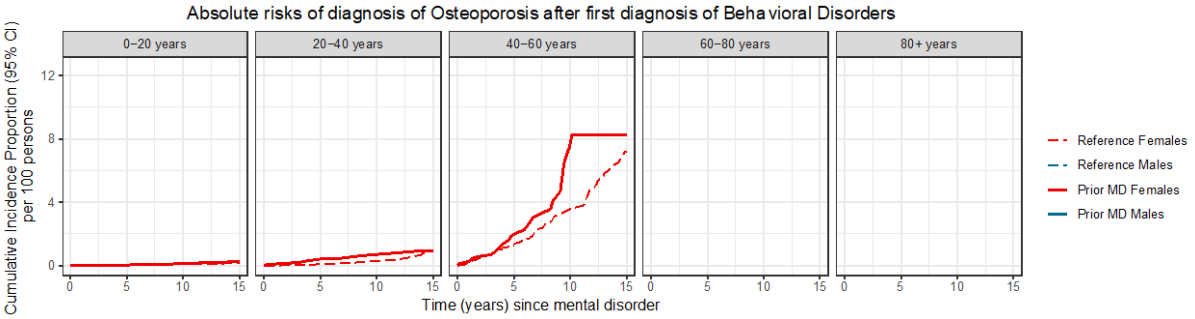


Figure S142.21 – Painful Conditions

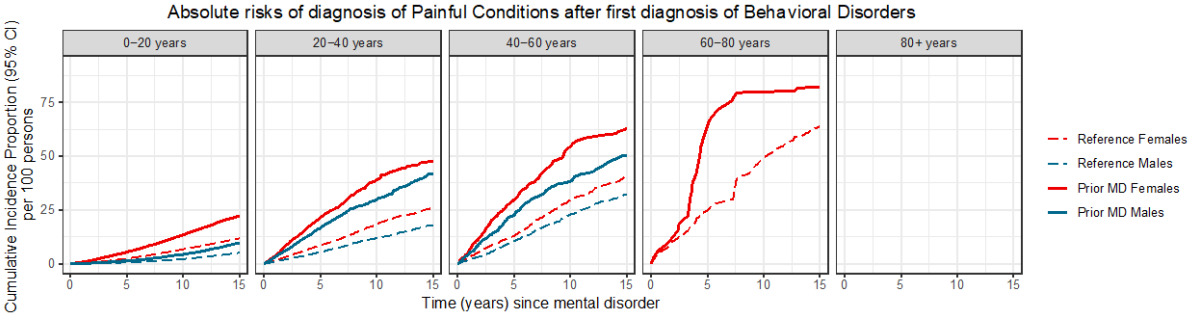


Figure S142.22 – HIV/AIDS

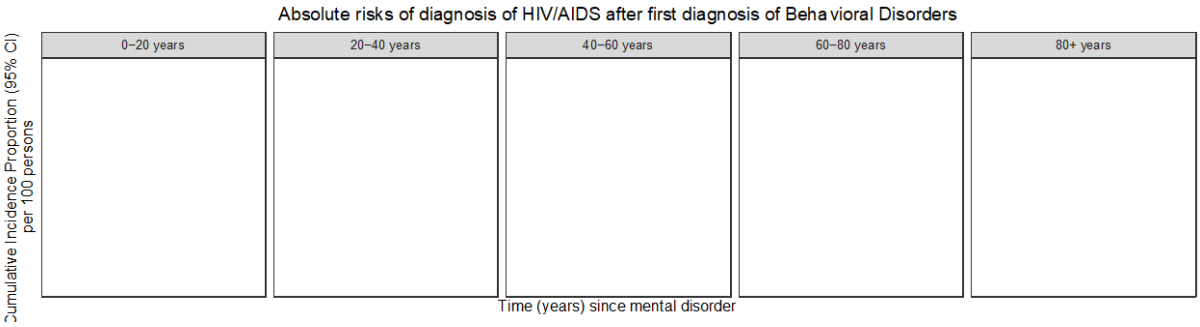


Figure S142.23 – Anemias

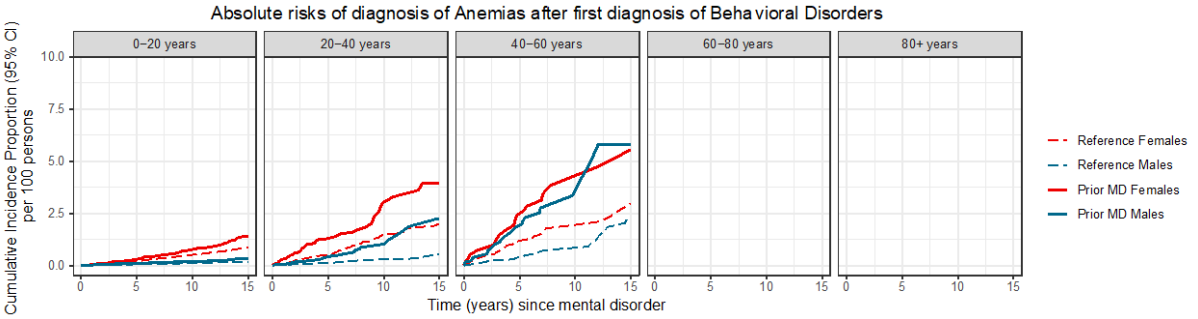


Figure S142.24 – Cancer

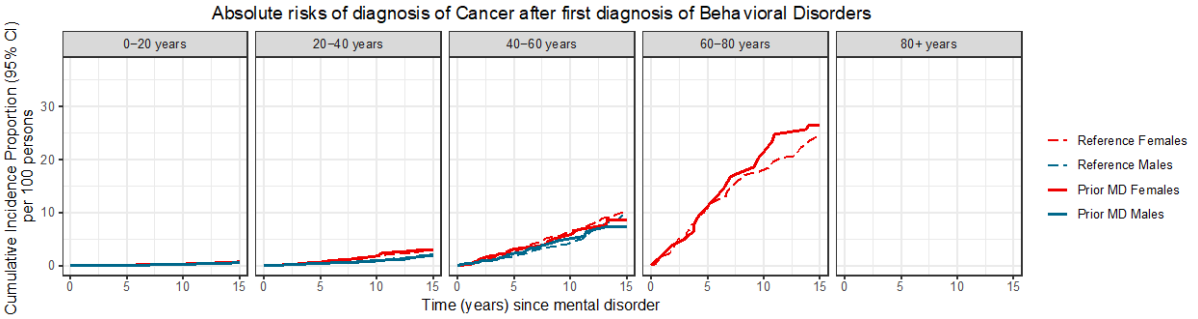


Figure S142.25 – Vision Problems

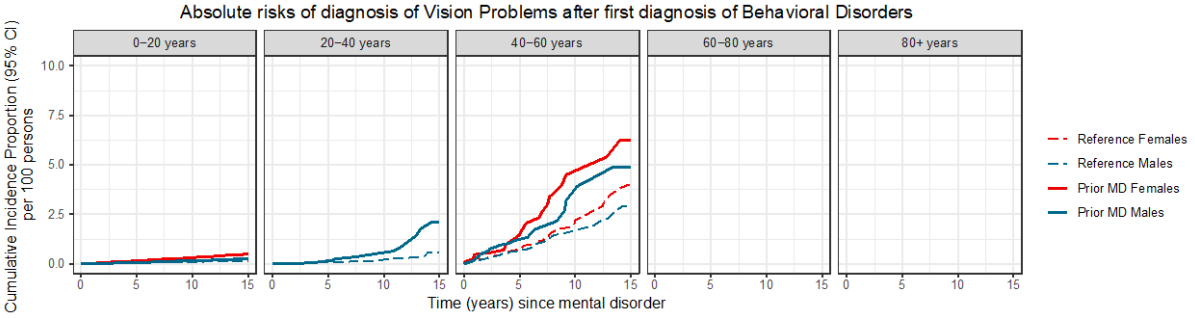


Figure S142.26 – Hearing Problems

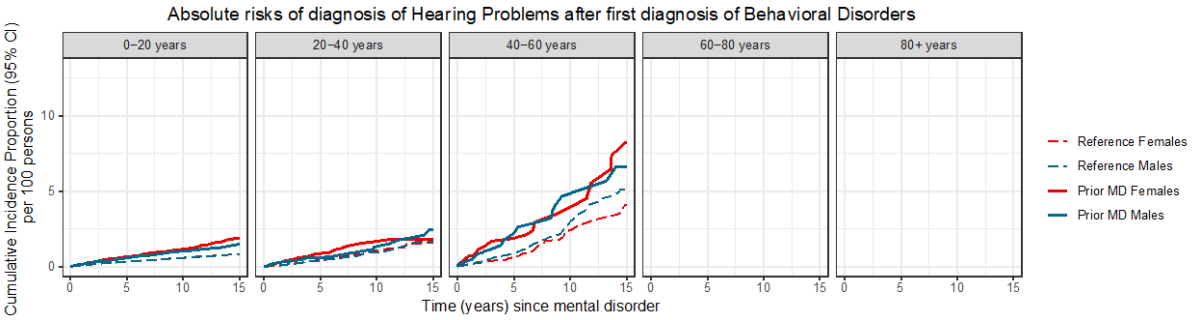


Figure S142.27 – Migraine

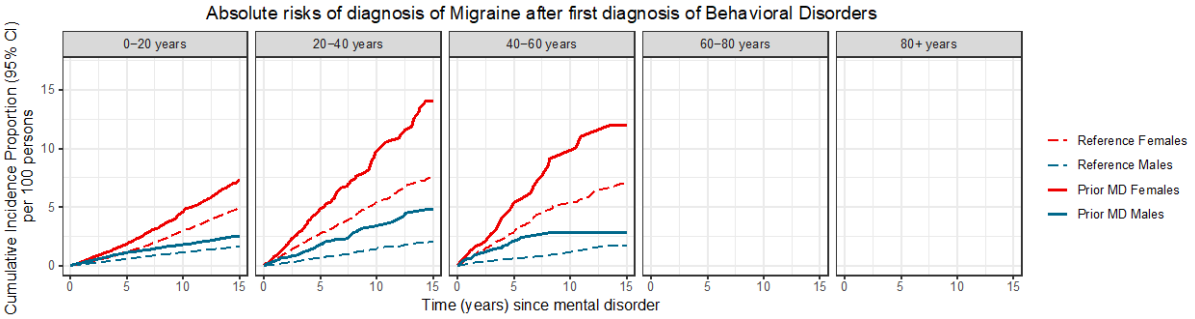


Figure S142.28 – Epilepsy

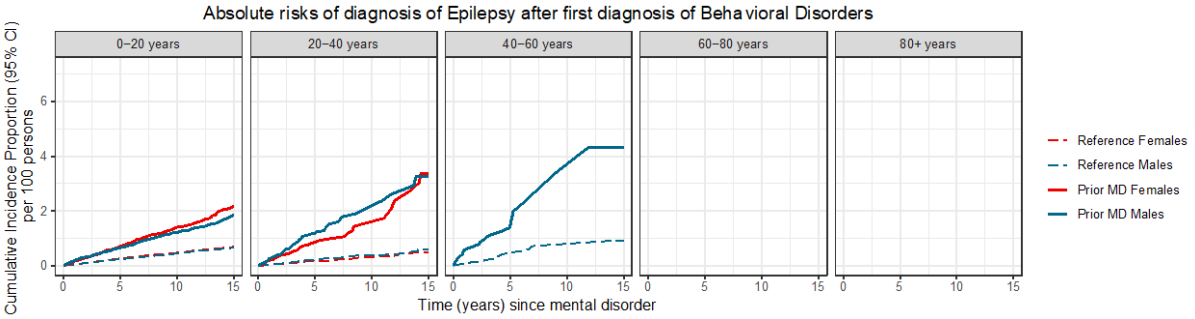


Figure S142.29 – Parkinson's Disease

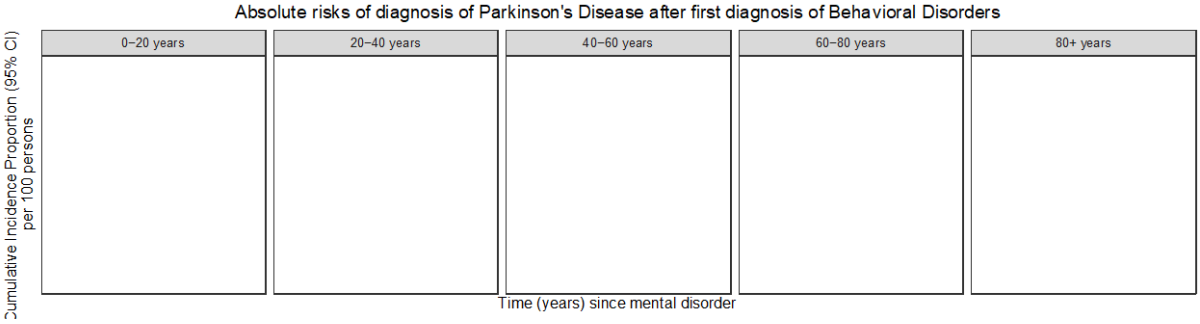


Figure S142.30 – Multiple Sclerosis

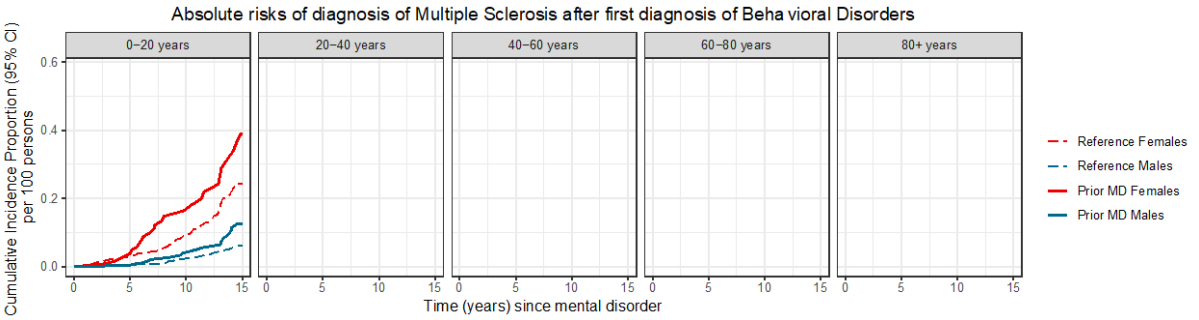
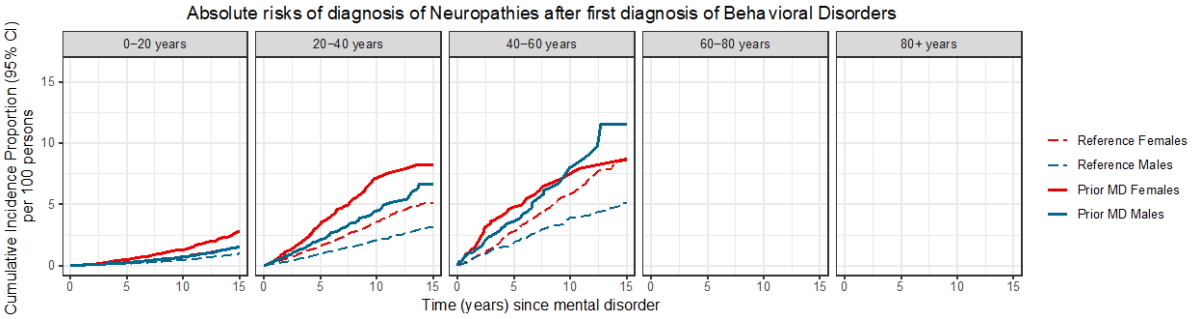


Figure S142.31 – Neuropathies



Supplementary Material - Association between Mental Disorders and Later Medical Conditions

Table S1. Diagnostic classification of mental disorders considered in this study according to the ICD-10 and equivalent ICD-8 diagnoses				
Mental disorders ***Examples of diagnoses included in each group***	**Abbreviated name used in this study**	**ICD-10**	**ICD-8 equivalency**	**Earliest possible age at onset in years**
Organic, including symptomatic, mental disorders *Includes dementia in Alzheimer's disease, vascular dementia, etc*.	Organic Disorders	F00 – F09	290.09, 290.10, 290.11, 290.18, 290.19, 292.x9, 293.x9, 294.x9, 309.x9	35
Mental and behavioral disorders due to psychoactive substance use *Includes use of alcohol, cannabis, cocaine, nicotine, opioids, sedatives, hypnotics, anxiolytics, etc.*	Substance Use Disorders	F10 – F19	291.x9, 294.39, 303.x9, 303.20, 303.28, 303.90, 304.x9	10
Schizophrenia and related disorders *Includes schizophrenia, schizotypal disorders, schizoaffective disorders and other psychotic disorders.*	Schizophrenia	F20 – F29	295.x9, 296.89, 297.x9, 298.29-298.99, 299.04, 299.05, 299.09, 301.83	10
Mood disorders *Includes bipolar disorder, depressive disorders, etc.*	Mood Disorders	F30 – F39	296.x9 (excluding 296.89), 298.09, 298.19, 300.49, 301.19	10
Neurotic, stress-related, and somatoform disorders *Includes anxiety disorders, phobias, obsessive-compulsive disorders, etc.*	Neurotic Disorders	F40 – F48	300.x9 (excluding 300.49), 305.x9, 305.68, 307.99	5
Eating disorders *Includes anorexia nervosa, bulimia nervosa, etc.*	Eating Disorders	F50	305.60, 306.50, 306.58, 306.59	1
Specific personality disorders	Personality Disorders	F60	301.x9 (excluding 301.19), 301.80, 301.81, 301.82, 301.84	10
Intellectual Disabilities	Intellectual Disabilities	F70 – F79	311.xx, 312.xx, 313.xx, 314.xx, 315.xx	1
Pervasive developmental disorders *Includes autism spectrum disorder*	Developmental Disorders	F84	299.00, 299.01, 299.02, 299.03	1
Behavioral and emotional disorders with onset usually occurring in childhood and adolescence *Includes attention-deficit hyperactivity disorder, conduct disorders, childhood emotional disorders, etc.*	Behavioral Disorders	F90 – F98	306·x9, 308·0x	1

Table S2. Coding algorithm for each general medical condition category and specific general medical condition

Category	Coding definition	Diagnosis/ mortality codes (ICD-10)	Medication	
			Drug codes (ATC)	Time frame for prescriptions
CIRCULATORY SYSTEM				
Hypertension	Diagnosis AND/OR prescriptions of antihypertensives [a]	I10-I13, I15	C02, C03, C04, C07, C08, C09	Twice in 1 year
Dyslipidemia	Diagnosis AND/OR prescription of lipid-lowering drugs [b]	E78	C10	Twice in 1 year
Ischemic heart disease	Diagnosis AND/OR prescription for antianginal drug	I20-I25	C01DA	Twice in 1 year
Atrial fibrillation	Diagnosis	I48		
Heart failure	Diagnosis	I50		
Peripheral artery occlusive disease	Diagnosis	I70-I74		
Stroke	Diagnosis	I60-I64, I69		
ENDOCRINE SYSTEM				
Diabetes mellitus	Diagnosis AND/OR prescription of antidiabetics	E10-E14	A10A, A10B	Twice in 1 year
Thyroid disorder	Diagnosis AND/OR prescription of thyroid therapy drugs	E00-E05, E061-E069, E07	H03	Twice in 1 year
Gout	Diagnosis	E79, M10		
PULMONARY SYSTEM AND ALLERGY				
Chronic pulmonary disease	Diagnosis AND/OR Prescription for obstructive airway disease drugs	J40-J47	R03	Twice in 1 year
Allergy	Diagnosis AND/OR Prescription for non-sedative antihistamines AND/OR nasal antiallergics	J30.1-J30.4, L23, L50.0, T78.0. T78.2, T78.4	R06AX, R06AE07, R06AE09, R01AC, R01AD	Twice in 1 year
GASTROINTESTINAL SYSTEM				
Ulcer/chronic gastritis	Diagnosis	K221, K25-K28, K293-K295		
Chronic liver disease	Diagnosis	B16-B19, K70, K74, K766, I85		
Inflammatory bowel disease	Diagnosis	K50-K51		
Diverticular disease of intestine	Diagnosis	K57		

UROGENITAL SYSTEM				
Chronic kidney disease	Diagnosis	N03, N11, N18-N19		
Prostate disorders	Diagnosis AND/OR prescription of prostate hyperplasia therapy drugs	N40	C02CA, G04C	Twice in 1 year
MUSCULOSKELETAL SYSTEM				
Connective tissue disorders	Diagnosis	M05-M06, M08-M09, M30-M36, D86		
Osteoporosis	Diagnosis AND/OR prescription for osteoporosis drugs	M80-M82	M05B, G03XC01, H05AA	Twice in 1 year
Painful condition	Repeated prescriptions of analgesics		N02A, N02BA51, N02BE, M01A, M02A	4x in 1 year
HEMATOLOGICAL SYSTEM				
HIV/AIDS	Diagnosis	B20-B24		
Anemias	Diagnosis	D50-D53, D55-D59, D60-D61, D63-D64		
CANCERS	Diagnosis	C00-C43, C45-C97		
NEUROLOGICAL SYSTEM				
Vision problem	Diagnosis	H40, H25, H54		
Hearing problem	Diagnosis	H90-H91, H931		
Migraine	Diagnosis AND/OR prescription of specific anti-migraine drugs	G43	N02C	Twice in 1 year
Epilepsy	Diagnosis AND prescription of anti-epileptics	G40-G41	N03	Twice in 1 year
Parkinson's disease	Diagnosis	G20-G22		
Multiple sclerosis	Diagnosis	G35		
Neuropathies	Diagnosis	G50-G64		

[a]Ascertained only in absence of ischemic heart disease/heart failure, and by diuretics only if no kidney disease
[b]Prescriptions used if no previous ischemic heart disease

Table S3. Frequencies of persons at risk and incident cases for each general medical condition category and specific general medical condition, in the total cohort of 5,940,299 individuals

Category	Prevalent cases before follow-up	Persons at risk at start of follow-up	New cases during follow-up
CIRCULATORY SYSTEM	744,738	5,195,561	1,359,330
Hypertension	619,788	5,320,511	1,095,310
Dyslipidemia	177,355	5,762,679	671,523
Ischemic heart disease	139,554	5,800,745	392,187
Atrial fibrillation	44,123	5,896,176	275,360
Heart failure	34,872	5,905,427	200,040
Peripheral artery occlusive disease	35,941	5,904,358	172,114
Stroke	53,168	5,887,131	283,217
ENDOCRINE SYSTEM	192,693	5,747,606	509,365
Diabetes mellitus	98,567	5,841,732	291,750
Thyroid disorder	93,790	5,846,509	232,243
Gout	7,037	5,933,262	38,880
PULMONARY SYSTEM & ALLERGY	915,893	5,024,406	1,152,776
Chronic pulmonary disease	599,388	5,340,911	723,876
Allergy	426,073	5,514,226	752,375
GASTROINTESTINAL SYSTEM	81,716	5,858,583	327,697
Ulcer/chronic gastritis	40,399	5,899,900	130,746
Chronic liver disease	10,737	5,929,562	47,060
Inflammatory bowel disease	16,592	5,923,707	49,588
Diverticular disease of intestine	17,346	5,922,953	136,560
UROGENITAL SYSTEM	76,138	5,864,161	263,343
Chronic kidney disease	7,224	5,933,075	89,798
Prostate disorders [a]	69,831	2,888,204	195,111
MUSCULOSKELETAL SYSTEM	542,215	5,398,084	1,397,516
Connective tissue disorders	36,829	5,903,470	118,492
Osteoporosis	31,220	5,909,079	249,455
Painful condition	515,211	5,425,088	1,318,615
HEMATOLOGICAL SYSTEM	24,754	5,915,545	218,753

HIV/AIDS	1,525	5,938,774	2,628
Anemias	23,297	5,917,002	216,427
CANCERS	83,135	5,857,164	481,012
NEUROLOGICAL SYSTEM	330,553	5,609,746	915,021
Vision problem	69,378	5,870,921	379,498
Hearing problem	130,021	5,810,278	292,008
Migraine	83,184	5,857,115	169,647
Epilepsy	22,062	5,918,237	55,924
Parkinson's disease	5,111	5,935,188	23,054
Multiple sclerosis	6,250	5,934,049	12,615
Neuropathies	38,841	5,901,458	231,289

[a] Only males “at risk” for prostate disorders - 2,958,035 males in the cohort

Table S4. Baseline characteristics of the study population			
Sex	Men	2,958,035	49.8%
	Women	2,982,264	50.2%
Birth year	1900-1910	37,908	0.6%
	1911-1920	192,783	3.3%
	1921-1930	357,663	6.0%
	1931-1940	470,614	7.9%
	1941-1950	709,860	12.0%
	1951-1960	680,633	11.5%
	1961-1970	724,485	12.2%
	1971-1980	636,257	10.7%
	1981-1990	542,310	9.1%
	1991-2000	662,677	11.2%
	2001-2010	638,698	10.8%
	2011-2015	286,411	4.8%
Age at start of follow-up, med (IQR)		32.1	(7.4-52.9)
Age at end of follow-up, med (IQR)		48.7	(24.3-68.6)

All results presented in n (%) unless stated otherwise

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